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NATIONAL HOSPITAL PRODUCTIVITY IMPROVEMENT PROGRAM

HOUSEKEEPING DEPARTMENT STAFFING METHODOLOGY

Health Services Directorate
Health Services and Promotion Branch

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The National Hospital Productivity Improvement Program is a joint, cost-shared Federal/Provincial Program directed by the Federal/Provincial Sub-Committee on Productivity Improvement under the aegis of the Federal/ Provincial Advisory Committee on Institutional and Medical Services.

Additional copies of this
STAFFING METHODOLOGY may be obtained
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SUB-COMMITTEE ON PRODUCTIVITY IMPROVEMENT

The National Hospital Productivity Improvement Program comes under the aegis of the Federal/Provincial Sub-committee on Productivity Improvement which, in turn, reports to the Federal-provincial Advisory Committee on Institutional and Medical Services.

The Housekeeping Department Staffing Methodology is a British Columbia Ministry of Health contribution to this Program.

The terms of reference below outline the Sub-committee on Productivity Improvement's role in developing Workload Measurement Systems (WMS) and Staffing Methodologies (SM).

(i) TERMS OF REFERENCE

The **SUB-COMMITTEE ON PRODUCTIVITY IMPROVEMENT** is responsible for directing and coordinating the ongoing **National Hospital Productivity Improvement Program**, established on a cooperative federal-provincial basis.

Major facets of the program include the development, promotion, evaluation, maintenance and funding of Workload Measurement Systems and Staffing Methodologies. Other functions inherent in the Sub-Committee's mandate include the liaison with professional associations and the provision of assistance to such organizations in the assessment of their requirements relative to the National Hospital Productivity Improvement Program and the preparation, testing, publication, education and implementation of Workload Measurement Systems in the field.

Health and Welfare Canada provides overall program coordination. Statistics Canada is responsible for the provision of national statistics through the "Annual Return of Health Care Facilities" and the "Quarterly Hospital Information System".

This committee is a Standing Committee of the Advisory Committee on Institutional and Medical Services. The organization chart on the following page illustrates the committee's working relationships.

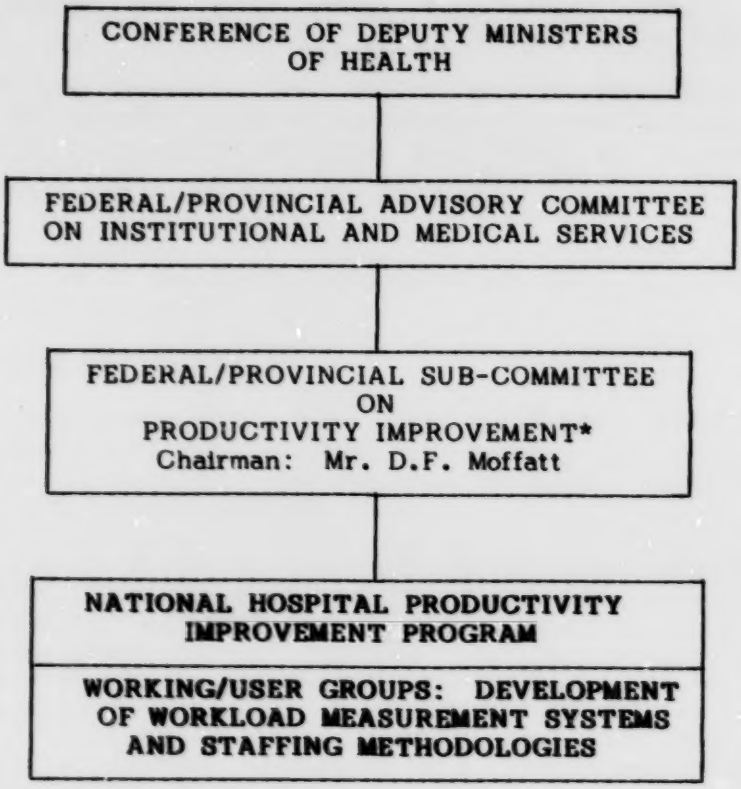
(ii) REPRESENTATION

The committee comprises representatives from Health and Welfare Canada, provincial health authorities, the Canadian Hospital Association/MIS PROJECT, hospitals, the Toronto Institute of Medical Technology and Statistics Canada.

The task of developing specific workload measurement systems and of providing ongoing systems maintenance is primarily being carried out by nationally representative **WORKING GROUPS** predominantly comprising health professionals drawn from the relevant national professional organizations.

In addition, selected S.M./W.M.S. are developed through a direct contribution of health organizations or under contract by recognized specialists in the health care sector in collaboration with advisory groups.

(iii) ORGANIZATION


CONFERENCE OF DEPUTY MINISTERS OF HEALTH
FEDERAL/PROVINCIAL ADVISORY COMMITTEE ON INSTITUTIONAL AND MEDICAL SERVICES
FEDERAL/PROVINCIAL SUB-COMMITTEE ON PRODUCTIVITY IMPROVEMENT* Chairman: Mr. D.F. Moffatt
NATIONAL HOSPITAL PRODUCTIVITY IMPROVEMENT PROGRAM
WORKING/USER GROUPS: DEVELOPMENT OF WORKLOAD MEASUREMENT SYSTEMS AND STAFFING METHODOLOGIES

*Program Coordination provided by:

Health Services Directorate,
Health and Welfare Canada

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SECTION 1

INTRODUCTION

1.1 OBJECTIVE

The development of the Housekeeping Department Staffing Methodology was based on an earlier, well researched housekeeping staffing methodology that was compiled in 1973.

A primary objective of this methodology was to revise the earlier information so that calculation of workloads would be less complex and quicker to accomplish and to reflect and account for any changes in methods and/or machinery since 1973. A further objective was to ensure the applicability of the methodology in extended care and pediatric units.

1.2 CATEGORIES OF HOUSEKEEPING WORK

The work of the hospital housekeeping department has been split into 3 categories -

(1) Daily/Routine Cleaning

This involves trash removal, dusting, cleaning and floor maintenance in virtually all areas of the hospital on a regular basis, which usually is daily or alternate days.

An attempt has been made to simplify the workload calculations by producing "standard room" values for these activities for offices, patient rooms, attached washrooms, bathrooms, utility rooms and public or common use washrooms. Should the "standard room" data be applicable to the hospital assessing its housekeeping staffing requirements, then a lot of inventory taking becomes unnecessary.

It was hoped that "standard room" data sheets could be developed for each room or department in the hospital but this proved to be impossible because of the varying building layouts, room sizes, types and quantitites of furniture and fittings and also differing standards of cleanliness and appearance that hospitals require.

(2) Miscellaneous/Periodic Tasks

This category covers all other work which has to be done on a fairly regular basis but is not tied to a fixed routine. Examples of this will differ from one hospital to another but may include discharge or terminal bed cleaning, furniture and equipment movement, garbage compacting, laundry movement, etc.

(3) Project Work

This is normally work of a major nature such as window washing, wall and ceiling cleaning, cleaning drapes, floor stripping, sealing and waxing.

1.3 HOUSEKEEPING FREQUENCIES

This report does not specify frequencies for performing the various activities, only the Standard Times for them. As such, it does not represent an absolute statement on required staffing, but is a tool which executive housekeepers can use to manage their staff resources and assess the implications of alternative actions.

Section 5 contains a list of frequencies representing a cross-section of current practice in hospitals. This frequency list is not intended to be the final answer to each situation, as local conditions, hospital requirements, and available funding may dictate variation.

1.4 EXTENDED CARE AND PEDIATRIC UNITS

As alluded to in section 1.1, the earlier housekeeping department staffing methodology did not include separate standard times for housekeeping activities in Extended Care and Pediatric Units. During discussions with executive housekeepers, it became apparent that the time to complete the task was, in the majority of cases, the same as that in an acute setting. However, the frequencies of these activities may differ and therefore the same task may require less or more time during the day in Extended Care and Pediatric Care than in an acute care setting.

SECTION 2

WORKLOAD CALCULATION PROCEDURE

2.0 WORKLOAD CALCULATION PROCEDURE

(A flowchart of Workload Calculations appears as Figure 1, page 8)

2.1 LIST ALL ROOMS BY FLOOR OR AREA

2.1.1 Select a floor or an area to be recorded.

2.1.2 Walk through the floor or area, or study floor plans, and list all rooms, corridors offices and washrooms. The list may be on any paper; no special form is needed.

2.1.3 Repeat 2.1.1 and 2.1.2, until rooms on all floors or hospital areas are listed.

2.2 CALCULATE WORKLOAD FOR DAILY/ROUTINE HOUSEKEEPING

2.2.1 Select the first room on the room list for a floor or hospital area.

2.2.2 Compare the room size and furnishings with the appropriate chart in Section 3, "Standard Room Data Sheets". If there is a close match:

- Enter the room information on a line of Worksheet 1, "Standard Room Summary Sheet".

Otherwise:

- List furnishings, floors, windows, etc. and their related housekeeping activities on a copy of Worksheet 2, "Daily/Routine Housekeeping Activities Not Covered by 'Standard Room' Data Sheets".

- Fill in the "Standard Minutes Per Item or Square Foot" column from Section 4, "List of Standard Times".

- Fill in the "Frequency of Activity Per Week".

- If required for planning shifts, fill in the "Standard Minutes Per Day" columns with a breakdown of the minutes per day of the week.

- Complete the "Standard Minutes Per Year" column as indicated, for each activity. Total the activity times to determine the "Total Standard Minutes Per Year" for the room or department.

2.2.3 Repeat step 2.2.2 with the next room on the list until all rooms have been considered for daily/routine housekeeping.

2.2.4 Total all copies of Worksheet 1 and Worksheet 2 to determine the total number of standard minutes for daily/routine housekeeping.

2.3 CALCULATE WORKLOAD FOR MISCELLANEOUS/PERIODIC HOUSEKEEPING

2.3.1 Select the first department or room on the room list for the first floor or hospital area.

2.3.2 Identify all work to be done on a fairly regular basis but not tied to a fixed routine. That is, identify all work that cannot be called daily/routine or project work. List the work on a copy of Worksheet 3, "Miscellaneous/Periodic Housekeeping Activities".

2.3.3 Record the number of items or the square feet involved with each item and housekeeping activity.

2.3.4 Record the standard minutes per item/sq. ft. by consulting Section 4, "List of Standard Times".

2.3.5 Complete the frequency column of Worksheet 3.

2.3.6 If required for planning shifts, fill in the "Standard Minutes Per Day" columns with a breakdown of the minutes per day of the week.

2.3.7 Carry out the calculations shown on Worksheet 3 to determine the total standard minutes per year of miscellaneous/periodic activities for the room.

2.3.8 Repeat steps 2.3.2 to 2.3.7 with the next room on the list until all rooms and departments have been considered for miscellaneous/periodic housekeeping.

2.4 CALCULATE WORKLOAD FOR PROJECT WORK

2.4.1 Select the first floor or hospital area on the room list.

2.4.2 Identify all project work for the area and list on Worksheet 4, "Housekeeping Projects".

2.4.3 Enter on Worksheet 4 the standard minutes per item or per square foot, determined by Consulting Section 4, "List of Standard Times".

2.4.4 Enter on Worksheet 4 the frequency per year of each project.

2.4.5 Calculate total standard minutes per task by multiplying as shown on Worksheet 4, then add together the totals per task to obtain the total standard minutes per year for the floor or area under consideration.

2.4.6 If requred for annual workload planning, place a tick ( ) in the column representing the month for which the project work is scheduled.

2.4.7 Repeat steps 2.4.2 to 2.4.6 with the next floor or area until all floors and areas have been considered for project type housekeeping.

2.5 DETERMINE HOLIDAY AND SICKNESS ALLOWANCE

2.5.1 Complete Worksheet 5, "Holiday and Sickness Allowance" using figures obtained from the Director of Personnel or the Director of Finance.

2.6 CALCULATE FULL-TIME EQUIVALENTS REQUIRED

2.6.1 Add together the totals from all copies of Worksheet 1, and all copies of Worksheet 2. Enter this total for all daily/routine work on line 1.1 of Worksheet 6, "Housekeeping Staffing Summary".

2.6.2 Add together the totals from all copies of Worksheet 3 and enter this total, for all miscellaneous/periodic work, on line 1.2 of Worksheet 6.

2.6.3 Add together the totals from all copies of Worksheet 4 and enter this total, for all project work, on line 1.3 of Worksheet 6.

2.6.4 Add together lines 1.1, 1.2 and 1.3 of Worksheet 6 and enter the total on line 1.4. Divide line 1.4 by 60 and enter the result on line 1.5.

2.6.5 Complete part 2 of Worksheet 6 to determine FTE's required.

Note: Worksheet 6 can be completed for the entire hospital or for a particular section of the hospital.

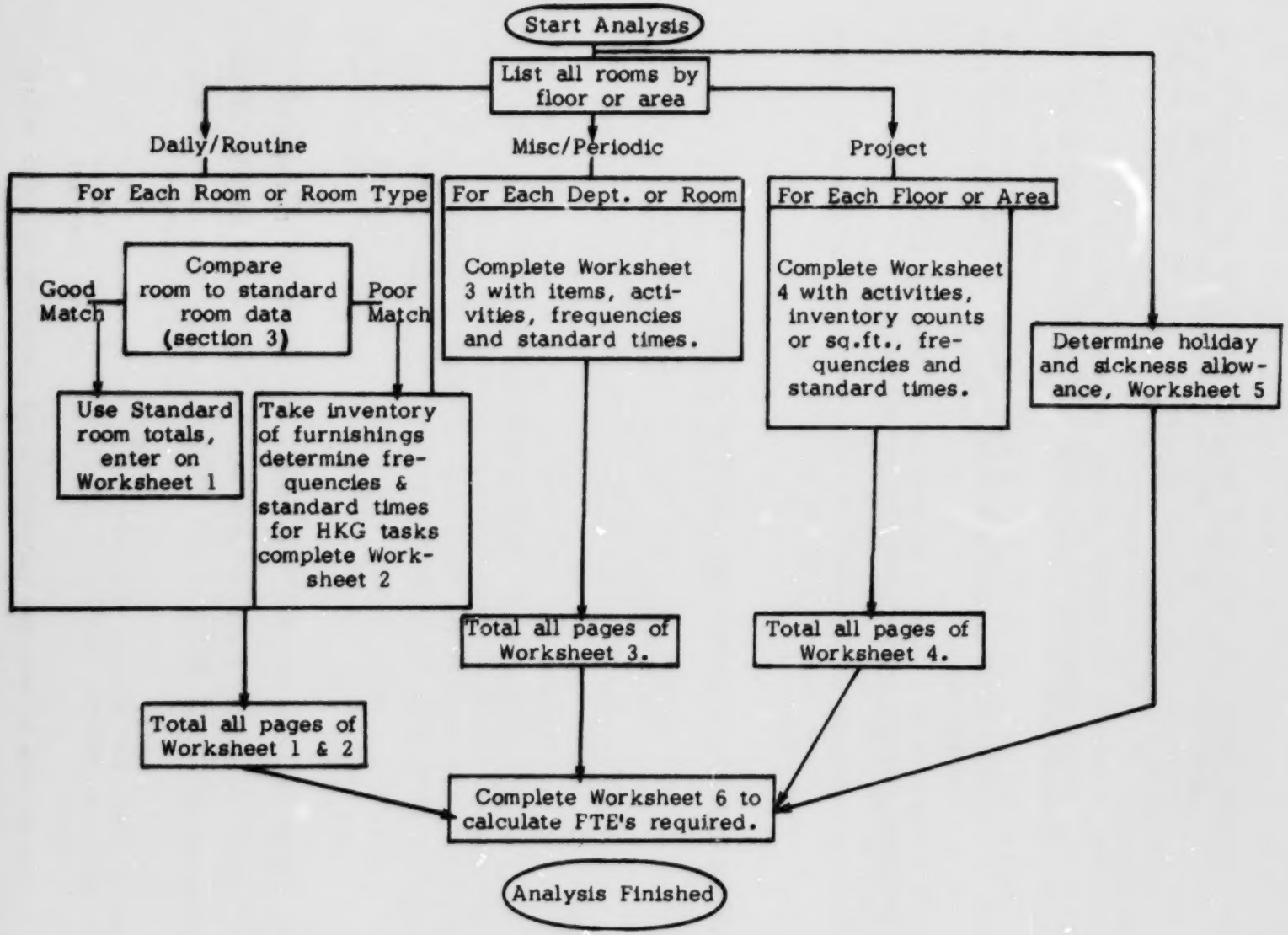
Start Analysis
List all rooms by floor or area
Daily/Routine
Misc/Periodic
Project
For Each Room or Room Type
For Each Dept. or Room
For Each Floor or Area
Compare room to standard room data (section 3)
Good Match
Poor Match
Use Standard room totals, enter on Worksheet 1
Take inventory of furnishings determine frequencies & standard times for HKG tasks complete Worksheet 2
Complete Worksheet 3 with items, activities, frequencies and standard times.
Complete Worksheet 4 with activities, inventory counts or sq.ft., frequencies and standard times.
Determine holiday and sickness allowance, Worksheet 5
Total all pages of Worksheet 3.
Total all pages of Worksheet 4.
Total all pages of Worksheet 1 & 2
Complete Worksheet 6 to calculate FTE's required.
Analysis Finished

Figure 1 - Flowchart of Workload Calculations

WORKSHEET 1

FLOOR/AREA:

'STANDARD ROOM'
STD MINS SUMMARY SHEET

		(A)	(B)	(C)	(D)								
Room No.(s)	Room Type	No. of Rooms	Std Mins Per Room	Total Daily Std Mins (A x B)	Freq. of Activity Per Week	Std Mins Per Day							Std Mins Per Year (CxDx52)
						Mon	Tue	Wed	Thur	Fri	Sat	Sun	

WORKSHEET 2

FLOOR/AREA:

DEPT/ROOM:

DAILY/ROUTINE HOUSEKEEPING ACTIVITIES NOT COVERED BY 'STANDARD ROOM' DATA SHEETS
STD MINS SUMMARY SHEET

(A) (B)

Item	Activity	No. of Items or Sq. Ft.	Std Mins Per Item/ Sq. Ft.	Total Daily Std Mins	Freq. of Activity Per Week	Std Mins Per Day							Std Mins Per Year (AxBx52)
						Mon	Tue	Wed	Thur	Fri	Sat	Sun	

WORKSHEET 3

FLOOR/AREA:

DEPT/ROOM:

MISCELLANEOUS/PERIODIC HOUSEKEEPING ACTIVITIES
STD MINS SUMMARY SHEET

		(A)	(B)	(C=AxB)	(D)								
Item	Activity	No. of Items or Sq. Ft.	Std Mins Per Item/ Sq. Ft.	Total Daily Std Mins	Freq. of Activity Per Week	Std Mins Per Day							Std Mins Per Year (CxDx52)
						Mon	Tue	Wed	Thur	Fri	Sat	Sun	

HOSPITAL: _____

FLOOR/AREA: _____

WORKSHEET 4

HOUSEKEEPING PROJECTS
STANDARD MINUTES SUMMARY SHEET

	(A)	(B)	(C)	(D)											
HOUSEKEEPING TASK ACTIVITY	No. of Items or Sq. Ft.	Std Mins Per Item/ Sq. Ft.^{2}	Frequency of Task Per Year	Total Std. Mins. (AxBxC)	Month Task Scheduled For										
					J	F	M	A	M	J	J	A	S	O	N	D
	TOTAL STD MINS/YEAR =														

SHEET_____OF_____

WORKSHEET 5

HOLIDAY AND SICKNESS ALLOWANCE

Statutory holidays, per worker	_____	days
Average annual vacation, per worker	_____	days
Average annual sick leave, per worker	_____	days
Other contract time off, average per worker	_____	days
TOTAL	_____	days

Holiday and sickness allowance = $\frac{261}{261 - \text{total}}$ = _____

WORKSHEET 6

HOUSEKEEPING STAFFING SUMMARY

Area/Department: _____

1. WORKLOAD SUMMARY

1.1	Total daily/routine work (from all copies of worksheets 1 & 2):	_____std. min./y
1.2	Total misc/periodic work (from all copies of worksheet 3):	_____std. min./y
1.3	Total project work (from all copies of worksheet 4):	_____std. min./y
1.4	Total workload (1.1 + 1.2 +1.3):	_____std. min./y
1.5	Workload in hours (divide line 1.4 by 60)	_____std. min./y

2. FULL-TIME EQUIVALENT CALCULATION

2.1 Basic hours per FTE = 261 days x 7.5 hours = 1957.5 hours

2.2 Total hours required = workload in hours x holiday and sickness allowance.
= (line 1.5)_____ x (from worksheet 5) _____
= _____

2.3 Number of FTE's = total hours required ÷ basic hours per FTE
= (line 2.2) _____ ÷ 1957.5
= _____

2.4 Number of supervisory FTE's = _____ (determined by hospital policy)

2.5 Total FTE's = (line 2.3 + line 2.4) _____ FTE's

SECTION 3

DAILY/ROUTINE CLEANING

'STANDARD ROOM' DATA SHEETS

3.0 STANDARD ROOM DATA SHEETS FOR DAILY/ROUTINE CLEANING

These sheets have been compiled to avoid the need for time consuming recording of furniture inventory, measuring of surface areas and the subsequent arithmetic calculations. They contain the total 'standard minutes' for completing the daily/routine housekeeping tasks based on the average contents of the rooms.

Variations in the contents of the rooms may be ignored unless, in the opinion of the Executive Housekeeper, the variations are significant. If the Standard Room Data Sheets do not match closely enough, a copy of Worksheet 2 must be completed, as described in the Workload Calculation Procedure in section 2. Worksheet 2 may also be used to develop new Standard Room Data Sheets, if there is a number of similar rooms in the hospital that are not covered by the present Standard Room Data Sheets.

Rooms, areas and departments which are cleaned on a routine basis but which are not covered by the Standard Room Data Sheet must be inventoried, measured and their workloads calculated using Worksheet 2, as described in the Workload Calculation Procedure, section 2 of this manual.

The standard room data are contained in the following tables:

Table 3.1 Routine Housekeeping Activities in General Offices
Table 3.2 Routine Housekeeping Activities in Executive and Private Offices
Table 3.3 Daily Housekeeping Activities in Patient Rooms (Acute)
Table 3.4 Daily Housekeeping Activities in Patient Rooms (ECU)
Table 3.5 Daily Housekeeping Activities in Bathroom Facilities Attached to Patient Rooms
Table 3.6 Daily Housekeeping Activities in Utility Rooms
Table 3.7 Daily Housekeeping Activities in Tub Rooms
Table 3.8 Daily Housekeeping Activities in Shower Rooms
Table 3.9 Daily Housekeeping Activities in Washrooms (Public/ Common Use)

TABLE 3.1

DAILY HOUSEKEEPING ACTIVITIES IN GENERAL OFFICES

Item	Activity	Std Mins Per Item	100 ft^2 or less		101-200 ft^2		201-300 ft^2		301-400 ft^2		401-500 ft^2	
			No Of Items	Std Mins	No Of Items	Std Mins	No Of Items	Std Mins	No of Items	Std Mins	No of Items	Std Mins
Chair	Damp Dust	0.26	3	0.78	4	1.04	5	1.30	6	1.56	8	2.08
Desk	Damp Dust	0.33	1	0.33	2	0.66	4	1.32	5	1.65	6	1.98
File Cabinet	Damp Dust	0.20	1	0.20	2	0.40	4	0.80	5	1.00	6	1.20
Typewriter	Damp Dust	0.33	1	0.33	2	0.66	2	0.66	2	0.66	2	0.66
Desk, Typewriter	Damp Dust	0.65	1	0.65	2	1.30	2	1.30	2	1.30	2	1.30
Telephone	Damp Dust	0.10	1	0.10	2	0.20	4	0.40	5	0.50	6	0.60
Counter Top 8 sq. ft.	Damp Dust	0.80	1	0.80	2	1.60	2	1.60	2	1.60	3	2.40
Table	Damp Dust	0.33	-	-	-	-	1	0.33	2	0.66	3	0.99
Coat Rack	Damp Dust	0.36	-	-	-	-	-	-	1	0.36	2	0.72
Window Ledge 3 ft.	Damp Dust	0.15	2	0.30	4	0.60	4	0.60	4	0.60	5	0.75
Bookcase	Damp Dust	0.71	1	0.71	2	1.42	2	1.42	2	1.42	2	1.42
Business Machine	Damp Dust	0.10	1	0.10	2	0.20	4	0.40	5	0.50	6	0.60
Ashtray	Empty and Clean	0.31	1	0.31	1	0.31	2	0.62	2	0.62	3	0.93
Waste Basket	Empty	0.37	1	0.37	2	0.74	4	1.48	5	1.85	6	2.22
Walls	Spot Clean Daily	0.60	1	0.60	1	0.60	1	0.60	1	0.60	1	0.60
Floor Care	Dry Mop	0.014	80 ft^2	1.12	163	2.28	241	3.37	360	5.04	450	6.30
Floor Care	Damp Mop	0.022	80 ft^2	1.76	163	3.59	241	5.30	360	7.92	450	9.90
Floor Care	Vacuum	0.020	80 ft^2	1.60	163	3.26	241	4.82	360	7.20	450	9.00
TOTAL STD MINS												
Office with Carpeted Floor				7.18		12.99		17.65		22.07		27.45
Office with Non-carpeted Floor				8.46		15.60		21.50		27.83		34.65

NOTES: 1. Any offices over 500 sq. ft. will have to be inventoried and calculated separately.

2. The totals generated for these offices represent the standard minutes per occasion cleaned but it must be remembered that most offices are only cleaned Monday - Friday and then only on alternate days. Where the removal of trash is still carried out daily, extra allowance should be made for this.

TABLE 3.2

DAILY HOUSEKEEPING ACTIVITIES IN EXECUTIVE AND PRIVATE OFFICES

Item	Activity	Std Mins Per Item	100 ft^2 or less		101-200 ft^2		201-300 ft^2	
			No Of Items	Std Mins	No Of Items	Std Mins	No Of Items	Std Mins
Chair (small)	Damp Dust	0.26	3	0.78	4	1.04	6	1.56
Desk	Damp Dust	0.33	1	0.33	1	0.33	1	0.33
Bookcase	Damp Dust	0.71	2	1.42	2	1.42	2	1.42
Dictaphone	Damp Dust	0.10	1	0.10	1	0.10	1	0.10
Intercom	Damp Dust	0.10	1	0.10	1	0.10	1	0.10
File Cabinet	Damp Dust	0.20	2	0.40	2	0.40	2	0.40
Telephone	Damp Dust	0.10	1	0.10	1	0.10	1	0.10
Table	Damp Dust	0.85	1	0.85	1	0.85	1	0.85
Business Machine	Damp Dust	0.10	1	0.10	1	0.10	1	0.10
Coat Rack	Damp Dust	0.36	1	0.36	1	0.36	1	0.36
Window Ledge (3 ft)	Damp Dust	0.15	3	0.45	4	0.60	5	0.75
Ashtray	Empty & Clean	0.31	1	0.31	1	0.31	1	0.31
Waste Basket	Empty	0.37	1	0.37	1	0.37	1	0.37
Walls	Spot Clean	0.60	1	0.60	1	0.60	1	0.60
Floor Care	Dry Mop	0.014	80 ft^2	1.12	163 ft^2	2.28	241 ft^2	3.37
Floor Care	Damp Mop	0.022	80 ft^2	1.76	163 ft^2	3.59	241 ft^2	5.30
Floor Care	Vacuum	0.020	80 ft^2	1.60	163 ft^2	3.26	241 ft^2	4.82
TOTAL STD MINS								
Office with Carpeted Floor			7.87		9.94		11.87	
Office with Non-carpeted Floor			9.15		12.55		15.72	

NOTE: The totals generated for these offices represent the standard minutes per occasion cleaned but it must be remembered that most offices are only cleaned Monday - Friday and then only on alternate days. Where the removal of trash is still carried out daily, extra allowance should be made for this.

TABLE 3.3

DAILY HOUSEKEEPING ACTIVITIES IN PATIENT ROOMS (ACUTE)

Item	Activity	Std Mins Per Item	1 Bed 168 sq. ft.		2 Bed 229 sq. ft.		3 Bed 324 sq. ft.		4 Bed 450 sq. ft.		5 Bed 550 sq. ft.	
			No Of Items	Std Mins	No Of Items	Std Mins	No Of Items	Std Mins	No of Items	Std Mins	No of Items	Std Mins
Bed	Damp Dust	0.77	1	0.77	2	1.54	3	2.31	4	3.08	5	3.85
Bedside Table	Damp Dust	0.35	1	0.35	2	0.70	3	1.05	4	1.40	5	1.75
Bedside Locker	Damp Dust	0.43	1	0.43	2	0.86	3	1.29	4	1.72	5	2.15
Chair, Large	Damp Dust	0.46	1	0.46	1	0.46	2	0.92	2	0.92	2	0.92
Chair	Damp Dust	0.26	1	0.26	2	0.52	3	0.78	4	1.04	5	1.30
Overbed Table	Damp Dust	0.33	1	0.33	2	0.66	3	0.99	4	1.32	5	1.65
Television	Damp Dust	0.50	1	0.50	2	1.00	3	1.50	4	2.00	5	2.50
Telephone	Damp Dust	0.10	1	0.10	1	0.10	1	0.10	2	0.20	2	0.20
Overbed Light	Damp Dust	0.19	1	0.19	2	0.38	3	0.57	4	0.76	5	0.95
Hand Basin	Clean	1.77	1	1.77	1	1.77	1	1.77	1	1.77	1	1.77
Waste Bin	Empty	0.37	1	0.37	1	0.37	1	0.37	1	0.37	1	0.37
Paper & Soap	Restock (Alt. Days)	1.30	1	1.30	1	0.65	1	0.65	1	0.65	1	0.65
	SUB TOTAL			6.18		9.01		12.30		15.23		18.06
Floor Care	Dry Mop	0.014 ft^2		2.35		3.21		4.54		6.30		7.70
Floor Care	Damp Mop	0.026 ft^2		4.37		5.95		8.42		11.70		14.30
	TOTAL STD MINS/ROOM			12.90		18.17		25.26		33.23		40.06
Attached Bathroom Facilities				8.84		8.84		8.84		8.84		8.84
Total Standard Mins For:												
a) Patient Room with attached Bathroom Facilities				21.74		22.59		34.10		42.07		48.90
b) Patient Room with shared Bathroom Facilities				17.32		22.59		29.68		37.65		44.48
c) Patient Room without attached Bathroom Facilities				12.90		18.17		25.26		33.23		40.06

TABLE 3.4

DAILY HOUSEKEEPING ACTIVITIES IN PATIENT ROOMS (E.C.U.)

Item	Activity	Std Mins Per Item	1 Bed 168 sq. ft.		2 Bed 229 sq. ft.		3 Bed 324 sq. ft.		4 Bed 450 sq. ft.		5 Bed 550 sq. ft.	
			No of Items	Std Mins	No Of Items	Std Mins	No Of Items	Std Mins	No of Items	Std Mins	No of Items	Std Mins
Bed	Damp Dust	0.77	1	0.77	2	1.54	3	2.31	4	3.08	5	3.85
Bedside Table	Damp Dust	0.35	1	0.35	2	0.70	3	1.05	4	1.40	5	1.75
Bedside Locker	Damp Dust	0.43	1	0.43	2	0.86	3	1.29	4	1.72	5	2.15
Bedside Shelves	Damp Dust	0.64	1	0.64	2	1.28	3	1.92	4	2.56	5	3.20
Overbed Table	Damp Dust	0.33	1	0.33	2	0.66	3	0.99	4	1.32	5	1.65
Chair (Small)	Damp Dust	0.26	1	0.26	1	0.26	2	0.52	2	0.52	2	0.52
Chair (Large)	Damp Dust	0.46	1	0.46	1	0.46	1	0.46	2	0.92	2	0.92
Television	Damp Dust	0.50	1	0.50	2	1.00	2	1.00	3	1.50	3	1.50
Telephone	Damp Dust	0.10	1	0.10	1	0.10	1	0.10	2	0.20	2	0.20
Overbed Light	Damp Dust	0.19	1	0.19	2	0.38	3	0.57	4	0.76	5	0.95
Hand Basin	Clean	1.77	1	1.77	1	1.77	1	1.77	1	1.77	1	1.77
Waste Bin	Empty	0.37	1	0.37	1	0.37	1	0.37	1	0.37	1	0.37
Paper & Soap	Restock (Alt Days)	1.30	1	0.65	1	0.65	1	0.65	1	0.65	1	0.65
	SUB TOTAL			6.82		10.03		13.00		16.77		19.48
Floor Care	Dry Mop	0.014 ft^2		2.35		3.21		4.54		6.30		7.70
Floor Care	Damp Mop	0.026 ft^2		4.37		5.95		8.42		11.70		14.30
	TOTAL STD MINS/ROOM			13.54		19.19		25.96		34.77		41.48
Attached Bathroom Facilities				8.84		8.84		8.84		8.84		8.84
Total Standard Mins For:												
a) Patient Room with attached Bathroom Facilities				22.38		28.03		34.80		43.61		50.32
b) Patient Room with shared Bathroom Facilities				17.96		23.61		30.38		39.19		45.90
c) Patient Room without attached Bathroom Facilities				13.54		19.19		25.96		34.77		41.48

TABLE 3.5

DAILY HOUSEKEEPING ACTIVITIES IN BATHROOM FACILITIES ATTACHED TO PATIENT ROOMS

Item	Activity	Std Mins/ Item	No of Items	Total Std Mins
Toilet	Clean	1.44	1	1.44
Sink	Clean	1.95	1	1.95
Mirror	Clean	0.45	1	0.45
Towel Rack	Clean	0.18	1	0.18
Paper Towel Dispenser	Clean	0.18	1	0.18
Soap Dispenser	Clean	0.25	1	0.25
Toilet Paper Dispenser	Clean	0.10	1	0.10
Bedpan Clean Equipment	Clean	0.25	1	0.25
Grab Rail	Clean	0.10	1	0.10
Shelves/Counter Top	Clean	0.15 ft^2	4 ft^2	0.60
Toilet Paper	Restock (Alt. Days)	0.32	1	0.16
Paper Towels	Restock (Alt. Days)	1.24	1	0.62
Soap	Restock (Alt. Days)	0.97	1	0.49
Waste	Empty	0.69	1	0.69
Floor Care	Damp Mop	0.030	46 ft^2	1.38
TOTAL STD MINS				8.84

TABLE 3.6

DAILY HOUSEKEEPING ACTIVITIES IN UTILITY ROOMS

A. CLEAN UTILITY

Item	Activity	Std Mins Per Item	100 ft^2 or less		101-200 ft^2	
			No of Items	Std Mins	No of Items	Std Mins
Shelves	Damp Dust	0.15 ft^2	20 ft^2	3.00	20 ft^2	3.00
Counter Top	Clean	0.15 ft^2	16 ft^2	2.40	16 ft^2	2.40
Sink	Clean	1.66	1	1.66	1	1.66
Ice Machine	Clean	3.37	1	3.37	1	3.37
Paper & Soap	Restock (Alt. Days)	1.30	1	0.65	1	0.65
Floor	Damp Mop	0.026 ft^2	80	2.08	163	4.24
TOTAL STD MINS				13.16		15.32

B. SOILED UTILITY

Item	Activity	Std Mins Per Item	100 ft^2 or less		101-200 ft^2	
			No of Items	Std Mins	No of Items	Std Mins
Flush Rim Sink	Clean	1.44	1	1.44	1	1.44
Bedpan Sanitizer	Clean	3.04	1	3.04	1	3.04
Counter Top	Clean	0.15 ft^2	16 ft^2	2.40	16 ft^2	2.40
Shelves	Clean	0.15 ft^2	40 ft^2	6.00	40 ft^2	6.00
Sink	Clean	1.66	1	1.66	1	1.66
Paper & Soap	Restock (Alt. Days)	1.30	1	1.30	1	1.30
Garbage Can	Empty & Reline	1.44	1	1.44	1	1.44
Floor	Wet Mop	0.030	80 ft^2	2.40	163 ft^2	4.89
TOTAL STD MINS				19.03		21.52

TABLE 3.7

DAILY HOUSEKEEPING ACTIVITIES IN TUB ROOMS

Item	Housekeeping Activity	Std Time Per Item or SQ FT	No of Items or SQ FT	Total Std Mins
Mirror	Clean	0.45	1	0.45
Shelf	Clean	0.14	1	0.14
Bathtub	Clean	4.00	1	4.00
Spot Clean Walls	Clean	0.43	1	0.43
Waste Bin	Empty	0.69	1	0.69
Soap	Restock	0.06	1	0.06
Floor Care	Wet Mop	0.026 ft^2	40 ft^2	1.04
TOTAL STD MINS				6.81

TABLE 3.8

DAILY HOUSEKEEPING ACTIVITIES IN SHOWER ROOMS

Item	Housekeeping Activity	Std Time Per Item or SQ FT	No of Items or SQ FT	Total Std Mins
Mirror	Clean	0.45	1	0.45
Shelf	Clean	0.14	1	0.14
Shower Stall	Clean	2.26	1	2.26
Spot Clean Walls	Clean	0.43	1	0.43
Waste Bin	Empty	0.69	1	0.69
Soap	Restock	0.06	1	0.06
Floor Care	Wet Mop	0.026 ft^2	20 ft^2	0.52
TOTAL STD MINS				4.45

TABLE 3.9

DAILY HOUSEKEEPING ACTIVITIES IN WASHROOM (PUBLIC/COMMON USE)

Item	Activity	Std Mins/ Item	No of Items	Total Std Mins
Toilet Bowl	Clean	1.44	1	1.44
Grab Bar	Clean	0.10	1	0.10
Hand Sink	Clean	1.95	1	1.95
Toilet Paper Dispenser	Clean	0.10	1	0.10
Paper Towel Dispenser	Clean	0.18	1	0.18
Paper Cup Dispenser	Clean	0.18	1	0.18
Soap Dispenser	Clean	0.25	1	0.25
Mirror	Clean	0.45	1	0.45
Toilet Paper	Restock (Alt. days)	0.32	1	0.16
Paper Towel	Restock (Alt. Days)	1.24	1	0.62
Paper Cups	Restock (Alt. Days)	0.32	1	0.16
Soap	Restock (Alt. Days)	0.06	1	0.03
Floor Care	Damp Mop	0.30 ft^2	33 ft^2	0.99
TOTAL STD MINS				6.61

SECTION 4

LIST OF STANDARD TIMES

LIST OF STANDARD TIMES

The values shown in this list for each item or per square foot are 'standard times' and as such therefore include an allowance for:

1) Get ready, put away and travel - 12%

2) Rest, coffee break and minor delay - 15%.

These standard values are given for average situations and/or conditions. It should be remembered that individual or local hospital conditions may necessitate the establishment of a 'standard time' pertinent to one hospital.

DECIMAL EQUIVALENTS

Seconds or Minutes	=	Decimal Minutes Decimal Hours	Seconds or Minutes	=	Decimal Minutes Decimal Hours
1		.0167	31		.5167
2		.0333	32		.5333
3		.05	33		.55
4		.0667	34		.5667
5		.0833	35		.5833
6		.1	36		.6
7		.1167	37		.6167
8		.1333	38		.6333
9		.15	39		.65
10		.1667	40		.6667
11		.1833	41		.6833
12		.2	42		.7
13		.2167	43		.7167
14		.2333	44		.7333
15		.25	45		.75
16		.2667	46		.7667
17		.2833	47		.7833
18		.3	48		.8
19		.3167	49		.8167
20		.3333	50		.8333
21		.35	51		.85
22		.3667	52		.8667
23		.3833	53		.8833
24		.4	54		.9
25		.4167	55		.9167
26		.4333	56		.9333
27		.45	57		.95
28		.4667	58		.9667
29		.4833	59		.9833
30		.5	60		1.

HOUSEKEEPING STANDARD TIMES

Items or Areas to be Cleaned	Activity	Std. Time (Mins.)
A. Adding Machine	Damp Dust	0.10
Addressograph	Damp Dust	0.10
Ancillary Patient Areas (sq. ft.)	Floor Care, Buff	0.023
Ancillary Patient Areas (sq. ft.)	Floor Care, Damp or Wet Mop	0.026
Ancillary Patient Areas (sq. ft.)	Floor Care, Dust Mop or Vacuum	0.014
Ash Tray	Empty and Wipe	0.31
Assembly Areas (sq. ft.)	Floor Care, Buff	0.019
Assembly Areas (sq. ft.)	Floor Care, Damp or Wet Mop	0.017
Assembly Areas (sq. ft.)	Floor Care, Dust Mop or Vacuum	0.014
Autoclave Front	Clean	1.00
Autoclave Inside	Clean	6.44
B. Bathtub	Clean	4.00
Bed	Clean, Thorough	10.90
Bed	Clean, Terminal (Adult)	29.00
Bed	Clean, Terminal (Paed)	24.00
Bed	Clean, Terminal (Bassinet)	8.00
Bed	Damp Dust	0.77
Bed	Daily Remake	4.64
Bedpan Sanitizer	Clean	3.04
Bedpan Shelf General	Clean	0.60
Bedpan Shelf Large	Clean	0.80
Bedpan Shelf Small	Clean	0.45
Bedside Shelf	Damp Dust	0.43
Bedside Table	Damp Dust	0.35
Bedside Waste Bag, Taped	Replace	0.68
Bench (sq. ft.)	Damp Dust	0.10
Bookcase, Large	Damp Dust	2.84
Bookcase, Small	Damp Dust	0.71
Bottle Sterilizer Machine	Clean	7.44
Botthe Washing Machine	Clean	2.91
Business Machine	Damp Dust	0.10

HOUSEKEEPING STANDARD TIMES (Cont'd)

Items or Areas to be Cleaned	Activity	Std. Time (Mins.)
C. Cabinet Face (sq. ft)	Damp Dust	0.10
Cafeteria (sq. ft.)	Floor Care, Buff	0.023
Cafeteria (sq. ft.)	Floor Care Damp or Wet Mop	0.030
Cafeteria (sq. ft.)	Floor Care Dust Mop or Vacuum	0.014
Calculator	Damp Dust	0.10
Carpet	Floor Care Vacuum	0.020
Carpet by Brush and Cleaner	Floor Care Shampoo	0.310
Carpet by Machine, Heavy Obstruction	Floor Care Shampoo	0.170
Carpet by Machine, Medium Obstruction	Floor Care Shampoo	0.140
Carpet by Machine, Unobstructed	Floor Care Shampoo	0.120
Cart into & out of elevator (per trip)	Transportation	0.80
Case Room Cleanup (per case)	Clean	20.61
Ceiling (sq. ft.)	Clean	0.10
Ceiling (sq. ft.)	Vacuum	0.037
Chair	Damp Dust	0.26
Chair, Leatherette	Damp Dust	0.46
Change and Locker Rooms	Floor Care Buff	0.023
Change and Locker Rooms	Floor Care Damp or Wet Mop	0.022
Change and Locker Rooms	Floor Care Dust Mop or Vacuum	0.014
Child's High Chair	Damp Dust	0.28
Child's Playpen	Damp Dust	0.28
Child's Seat	Damp Dust	0.26
Child's Toys	Damp Dust	0.28
Cigarette Urn Sieve Sand Type	Empty	0.92
Clock	Damp Dust	0.77
Closed Cupboard Shelving	Damp Dust	0.15
Coat Rack	Damp Dust	0.36
Countertop, Arborite (sq. ft.)	Damp Dust	0.10
Countertop, Stainless Steel (sq. ft.)	Clean	0.40
Crib, Stainless Steel	Damp Dust	3.18
CSR (sq. ft.)	Floor Care, Buff	0.023

HOUSEKEEPING STANDARD TIMES (Cont'd)

Items or Areas to be Cleaned	Activity	Std. Time (Mins.)
C. CSR (sq. ft.)	Floor Care Damp or Wet Mop	0.022
CSR (sq. ft.)	Floor Care Dust Mop or Vacuum	0.014
Curtain, Bedside	Change	5.15
Curtain, Cubicle	Change	2.56
Curtain, Pr. of Heavy Drapes, Liners	Change	28.00
Curtain, Pr. of Heavy Drapes, No Liners	Change	18.00
Curtain, Pr. of Light Drapes	Change	6.44
Curtain, Pr. of Liners, No Drapes	Change	10.00
Curtain, Shower	Change	1.28
D. Delivery Table, Not Stainless Steel	Clean	3.86
Delivery Table, Stainless Steel	Clean	5.80
Desk	Damp Dust	0.33
Desk, Typewriter Style	Damp Dust	0.65
Dictaphone	Damp Dust	0.10
Dispenser for Brushes, Stainless Steel	Clean	0.18
Dispenser, Paper Cup	Clean	0.18
Dispenser, Paper Towel	Clean	0.18
Dispenser, Sanitary Napkin	Clean	0.18
Dispenser, Soap	Clean	0.25
Dispenser, Toilet Paper	Clean	0.10
Doors & Casings, Stainless Steel, Major Cleaning (sq. ft.)	Clean	0.39
Dresser	Damp Dust	0.81
E. Elevator Travel (per floor)	Transportation	0.120
Elevator Waiting Time (per trip)	Transportation	0.640
Examination and Treatment Room	Floor Care, Buff	0.023
Examination and Treatment Room	Floor Care, Damp or Wet Mop	0.026
Examination and Treatment Room	Floor Care, Dust Mop or Vacuum	0.014

HOUSEKEEPING STANDARD TIMES (Cont'd)

Items or Areas to be Cleaned	Activity	Std. Time (Mins.)
F. Fan, Table	Damp Dust	0.50
File Cabinet	Damp Dust	0.20
Fire Extinguisher	Damp Dust	0.91
Floors, Heavy Obstruction, Spray Buff	Floor Care, Buff	0.090
Floors, Light Obstruction, Spray Buff	Floor Care, Buff	0.050
Floors, Obstructed, 19" Machine	Floor Care, Resurface	0.246
Floors, Obstructed, 19" Machine	Floor Care, Strip	0.443
Floors, Obstructed, 24" Machine	Floor Care, Resurface	0.224
Floors, Obstructed, 24" Machine	Floor Care, Strip	0.398
Floor Sink	Clean	0.42
Floors, Unobstructed, 19" Machine	Floor Care, Resurface	0.191
Floors, Unobstructed, 19" Machine	Floor Care, Strip	0.388
Floors, Unobstructed, 24" Machine	Floor Care, Resurface	0.169
Floors, Unobstructed, 24" Machine	Floor Care, Strip	0.343
Flower Shelf	Clean	1.20
Fridge Door Front, Large	Clean	2.56
Fridge Door Front, Medium	Clean	2.23
Fridge Door Front, Small	Clean	1.60
Fridge, Small (inside)	Clean	6.44
Flush Rim Sink	Clean	1.44
Foot Stool	Damp Dust	0.27
G. Garbage Can, Lined (reline)	Empty	1.44
Garbage Can (steam clean)	Empty	2.58
Garbage Can , Utility	Clean	2.58
Garbage Can Washer	Clean	3.35
Grab Bar (running foot)	Damp Dust	0.30
Gift Shop	Floor Care, Buff	0.023
Gift Shop	Floor Care, Damp or Wet Mop	0.026
Gift Shop	Floor Care, Dust Mop or Vacuum	0.014

HOUSEKEEPING STANDARD TIMES (Cont'd)

Items or Areas to be Cleaned	Activity	Std. Time (Mins.)
H. Handrail (running foot)	Damp Dust	0.03
Hand Sink	Clean	1.95
Handling time per item onto cart and off cart into chute	Transportation	0.43
Handling time of an item onto a cart	Transportation	0.14
High Dusting (running foot)	Damp Dust	0.06
High Shelving (sq. ft.)	Clean	0.15
Hot Plate	Clean	2.06
Hyda Bath, Stainless Steel	Clean	5.15
I. Ice Machine, S.S. (outside of)	Clean	3.37
Incinerator	Clean	20.00
Instrument Table	Clean	0.81
Instrument Tray	Damp Dust	0.43
Interior Viewing Glass (sq. ft.)	Clean	0.10
Intercom	Damp Dust	0.10
K. Kettle	Damp Dust	0.32
Kitchen (sq. ft.)	Floor Care, Machine Deep Scrub	0.060
L. Laboratory (sq. ft.)	Floor Care, Buff	0.019
Laboratory (sq. ft.)	Floor Care, Damp or Wet Mop	0.022
Laboratory (sq. ft.)	Floor Care, Dust Mop or Vacuum	0.014
Lamp, Surgical, Stand	Damp Dust	0.44
Lamp, Table or Floor	Damp Dust	0.88
Lamp, Table or Floor	Wash	3.09
Laundry/Linen, Painted Cement (sq. ft.)	Floor Care, Damp or Wet Mop	0.022
Laundry/Linen, Painted Cement (sq. ft.)	Floor Care, Dust Mop or Vacuum	0.006
Liquid Soap Dispenser, Screw Bottle	Restock	0.97
Lockers, outside of	Damp Dust	0.60

HOUSEKEEPING STANDARD TIMES (Cont'd)

Items or Areas to be Cleaned	Activity	Std. Time (Mins.)
L. Locker and Change Rooms	Floor Care, Buff	0.023
Locker and Change Rooms	Floor Care, Damp or Wet Mop	0.022
Locker and Change Rooms	Floor Care, Dust Mop or Vacuum	0.014
M. Main Kitchen, Quarry Tile (sq. ft.)	Floor Care, Damp or Wet Mop	0.030
Main Kitchen, Quarry Tile (sq. ft.)	Floor Care, Dust Mop or Vacuum	0.020
Main Kitchen, Smooth Surface (sq. ft.)	Floor Care, Damp or Wet Mop	0.022
Mirror	Clean	0.45
Mirror Light	Damp Dust	0.06
Mirror Shelf	Clean	0.14
Morgue (sq. ft.)	Floor Care, Damp or Wet Mop	0.022
N. Nipple Washing Machine	Clean	2.40
Nurseries (sq. ft.)	Floor Care, Buff	0.019
Nurseries (sq. ft.)	Floor Care, Damp or Wet Mop	0.026
Nurseries (sq. ft.)	Floor Care, Dust Mop or Vacuum	0.014
Nursing Stations (sq. ft.)	Floor Care, Buff	0.019
Nursing Stations (sq. ft.)	Floor Care, Damp or Wet Mop	0.019
Nursing Stations (sq. ft.)	Floor Care, Dust Mop or Vacuum	0.014
O. Offices (sq. ft.)	Floor Care, Buff	0.023
Offices (sq. ft.)	Floor Care, Damp or Wet Mop	0.022
Offices (sq. ft.)	Floor Care, Dust Mop or Vacuum	0.014
Operating Room (sq. ft.)	Floor Care, Machine Deep Scrub	0.060
Operating Room, Between Operations	Clean	16.74
Outdoors Area (sq. ft.)	Floor Care, Sweep & Hose	0.023
Overbed Table	Damp Dust	0.33
Overhead Lights: 2' x 4', 1' x 4', 2' x 2'	Clean	6.36
Overhead Lights, Hall, Small,	Clean	2.47
Overhead Lights, Large Globe	Clean	3.71

HOUSEKEEPING STANDARD TIMES (Cont'd)

Items or Areas to be Cleaned	Activity	Std. Time (Mins.)
P. Paper Cup Dispenser	Restock	0.32
Paper Cup Dispenser	Clean	0.18
Paper Towel Dispenser	Clean	0.18
Paper Towel Dispenser	Restock	1.24
Paper Towel Dispenser, Lock Type	Restock	1.57
Paper Towel Dispenser, Stainless Steel	Clean	0.68
Partition	Damp Dust	1.00
Patient Rooms (sq. ft.)	Floor Care, Buff	0.023
Patient Rooms (sq. ft.)	Floor Care, Damp or Wet Mop	0.026
Patient Rooms (sq. ft.)	Floor Care, Dust Mop or Vacuum	0.014
Pharmacy (sq. ft.)	Floor Care, Buff	0.019
Pharmacy (sq. ft.)	Floor Care, Damp or Wet Mop	0.022
Pharmacy (sq. ft.)	Floor Care, Dust Mop or Vacuum	0.014
Piano	Damp Dust	0.50
Picture or Plaque	Damp Dust	0.66
Planter, Large	Damp Dust	2.57
Public Areas (sq. ft.)	Floor Care, Buff	0.17
Public Areas, Automatic Machine (sq. ft.)	Floor Care, Damp or Wet Mop	0.009
Public Areas, Handmop (sq. ft.)	Floor Care, Damp or Wet Mop	0.017
Public Areas, Dust Mop (sq. ft.)	Floor Care, Dust Mop or Vacuum	0.006
R. Radiator	Vacuum	3.540
Recreation Areas (sq. ft.)	Floor Care, Buff	0.023
Recreation Areas (sq. ft.)	Floor Care, Damp Mop or Wet Mop	0.017
Recreation Areas (sq. ft.)	Floor Care, Dust Mop or Vacuum	0.014
Rod, Stainless Steel (running foot)	Damp Dust	0.030
Room Spot Cleaning (per room per week)	Clean	3.86

HOUSEKEEPING STANDARD TIMES (Cont'd)

Items or Areas to be Cleaned	Activity	Std. Time (Mins.)
S. Sanitary Napkin Dispenser	Clean	0.18
Sanitary Napkin Dispenser	Restock	2.06
Scale	Damp Dust	0.55
Scrub Sink, Large	Clean	4.97
Shower Stall	Clean	2.26
Sink, Floor	Clean	0.42
Sink, Flush Rim	Clean	1.44
Sink, Hand	Clean	1.95
Sink, Scrub	Clean	3.86
Sink, Scrub, Large	Clean	4.97
Sink, Utility (single)	Clean (abrasive)	1.65
Sink, Utility (single)	Clean (germicide)	0.84
Sink, Utility (double)	Clean (abrasive)	3.30
Sink, Utility (double)	Clean (germicide)	1.65
Shelving or Closed Cupboard (sq. ft.)	Damp Dust	0.15
Soap Bar	Restock	0.06
Soap Dispenser	Clean	0.25
Soap, Liquid Dispenser, Concealed	Restock	2.58
Soap, Liquid Dispenser, Screw Bottle	Restock	0.97
Sofa	Damp Dust	0.67
Stretcher Beds (wipe only)	Damp Dust	0.60
Stretcher, Thorough	Clean	6.04
Storage Rooms (sq. ft.)	Floor Care, Buff	0.023
Storage Rooms (sq. ft.)	Floor Care, Damp or Wet Mop	0.022
Storage Rooms (sq. ft.)	Floor Care, Dust Mop or Vacuum	0.014
Stove or Rangette	Clean	4.12
T. Table, Assorted, Average Size	Damp Dust	0.85
Table, Conference	Damp Dust	3.30
Table, Dining	Clean	0.85

HOUSEKEEPING STANDARD TIMES (Cont'd)

Items or Areas to be Cleaned	Activity	Std. Time (Mins.)
T. Telephone	Damp Dust	0.10
Telephone Booth	Damp Dust	1.93
Television	Damp Dust	0.50
Terminal Clean Patient Room	Clean	23.00
Toaster	Damp Dust	0.32
Toilet Bowl with Stainless Steel Arms	Clean	2.06
Toilet Grab Rail	Clean	0.10
Toilet Paper Dispenser	Clean	0.10
Toilet Paper, Lock Type	Restock	0.46
Toilet Paper Roll	Restock	0.32
Trolley, Lakeside, Stainless Steel	Clean	1.33
Typewriter	Damp Dust	0.33
U. Urinal	Clean	1.34
Utility Sink, Double	Clean (abrasive)	3.30
Utility Sink, Double	Clean (germicide)	1.68
Utility Sink, Single	Clean (abrasive)	1.65
Utility Sink, Single	Clean (germicide)	0.84
V. Vent	Clean	5.15
Vent	Vacuum	0.97
Viewing Glass, Interior (sq. ft.)	Clean	0.10
W. Walking Carrying a load (per ft.)	Transportation	0.006
Walking pushing a cart (per ft.)	Transportation	0.008
Walking pushing a cart, obstructed area (per ft.)	Transportation	0.009
Walking unloaded unobstructed (per ft.)	Transportation	0.005

HOUSEKEEPING STANDARD TIMES (Cont'd)

	Items or Areas to be Cleaned	Activity	Std. Time (Mins.)
W.	Wall (sq. ft.)	Clean	0.100
	Wall (sq. ft.)	Vacuum	0.030
	Wall Lights	Damp Dust	0.19
	Washrooms (sq. ft.)	Floor Care, Damp or Wet Mop	0.030
	Wastebag, Bedside, Taped	Replace	0.68
	Waste Basket, Utility	Empty and Wipe	1.27
	Wastepaper Basket	Empty	0.37
	Wastepaper Basket, Lined	Empty and Reline	0.69
	Water Fountain	Clean	1.34
	Wax Bath for Feet	Clean	0.97
	Wheelchair (Thorough)	Clean	6.44
	Window, Fixed, No Screen	Clean	4.50
	Window, Inside of Window & Frame (sq. ft.)	Clean	1.61
	Window, Outside Only, Pole Method (sq. ft.)	Clean	0.12
	Window, Pivot Type with Screen	Clean	6.44
	Window, Remove & Replace 4 Sections and Screen	Clean	24.00
	Window Ledge (per ft.)	Damp Dust	0.05
	Women's Auxiliary Areas (sq. ft.)	Floor Care, Buff	0.02
	Women's Auxiliary Areas (sq. ft.)	Floor Care, Damp or Wet Mop	0.022
	Women's Auxiliary Areas (sq. ft.)	Floor Care, Dust Mop or Vacuum	0.014

SECTION 5

LIST OF ACTIVITIES AND FREQUENCIES

This report recognizes that the frequency of completing housekeeping activities cannot be exactly defined to be universally applicable. Executive housekeepers will always need to assess the frequencies applicable to their own hospitals, bearing in mind the hospital's needs, local conditions, availability of staff and financial resources.

It was thought, however, that the inclusion of a list of frequencies for housekeeping activities in the various hospital rooms/areas would be helpful for purposes of information and guidance, but as such, should not be regarded as a definitive statement that housekeeping departments should necessarily adhere to. This list is based on questionnaires distributed to a number of executive housekeepers, but has not been verified by management engineering techniques in relation to well defined standards of hygiene.

Area, Dept., or Room	Housekeeping Activity	Frequency							
		DAILY (5 DAYS)	DAILY (7 DAYS)	ALTERNATE DAYS	WEEKENDS	WEEKLY	EVERY TWO WEEKS	MONTHLY	AS REQUIRED
Cafeteria	Dry Mop Floor				X				
	Damp Mop Floor			X					
	Machine Scrub								X
	Vacuum Carpet	X							
Chapel	Dust Furnishings					X			
	Vacuum Carpet					X			
Clinic	Clean Sinks	X							
	Spot Clean Walls	X							
	Trash Removal	X							
	Restock Paper & Soap								X
	Dry & Damp Mop Floor	X							
Corridors (Admin. & Service Areas)	Clean Water Fountains			X					
	Clean Telephone Booths			X					
	Empty and Clean Ashtrays	X							
	Trash Removal	X							
	Spot Clean Walls								X
	Clean Interior Glass								X
	Dry & Damp Mop Floor			X					
	Vacuum Carpet			X					
	Machine Scrub Floor								X

Area, Dept., or Room	Housekeeping Activity	Frequency							
		DAILY (5 DAYS)	DAILY (7 DAYS)	ALTERNATE DAYS	WEEKENDS	WEEKLY	EVERY TWO WEEKS	MONTHLY	AS REQUIRED
Corridors (Patient Areas)	Clean Water Fountains		X						
	Clean Telephone Booths		X						
	Empty and Clean Ashtrays		X						
	Trash Removal		X						
	Spot Clean Walls								X
	Clean Interior Glass			X					
	Dry & Damp Mop Floor		X						
	Vacuum Carpet		X						
	Machine Scrub Floor								X
C.S.S.D.									
a) all areas	Clean Sinks		X						
	Trash Removal		X						
	Clean Interior Glass								X
	Restock Paper & Soap								X
	Spot Clean Walls								X
b) Decontamination	Wet Mop or Machine Scrub (days of use)								X
c) Clean Production	Damp Mop and Machine Scrub (Damp Mop one day then M/C Scrub the next)								X
d) Storage	Damp Mop	X							
	Machine Scrub								X

Area, Dept., or Room	Housekeeping Activity	Frequency							
		DAILY (5 DAYS)	DAILY (7 DAYS)	ALTERNATE DAYS	WEEKENDS	WEEKLY	EVERY TWO WEEKS	MONTHLY	AS REQUIRED
Day Care	Damp Mop Floor	X							
	Sanitize Furnishings	X							
Delivery Room	Wet Mop Floor — After each delivery								X
	Sanitize Furnishings — After each delivery								X
	Trash Removal — After each delivery								X
	Clean Plumbing Fixtures		X						
	Clean Interior Glass		X						
Dietary	Clean Stove Hoods						X		
	Spot Clean Walls								X
	Clean Interior Glass								X
	Wet Mop and	X							
	Machine Scrub				X				
	Machine Scrub only		X						
Dining Area (Ext. Care)	Clean Chairs								X
	Clean Tables								X
	Clean Interior Glass								X
	Dry Mop Floor (3 x daily)		X						
	Wet Mop (3 x daily)		X						
	Vacuum Carpet (3 x daily)		X						
	Machine Scrub								X

Area, Dept., or Room	Housekeeping Activity	Frequency							
		DAILY (5 DAYS)	DAILY (7 DAYS)	ALTERNATE DAYS	WEEKENDS	WEEKLY	EVERY TWO WEEKS	MONTHLY	AS REQUIRED
Elevators	Wash and Polish Doors		X						
	Spot Clean Walls		X						
	Wash Walls and Ceiling								X
	Dry and Damp Mop Floors		X						
Emergency	Damp Dust Furnishings		X						
	Trash Removal		X						
	Clean Sinks		X						
	Restock Paper and Soap								X
	Change Privacy Curtains								X
	Wet Mop Floor		X						
	Machine Scrub								X
Examination & Treatment	Damp Dust Furnishings		X						
	Clean Sinks		X						
	Trash Removal		X						
	Restock Paper and Soap								X
	Damp or Wet Mop Floor		X						
	Machine Scrub								X
Gift Shop (Volunteer)	Dry and Damp Mop Floor or Vacuum Carpet								X X

Area, Dept., or Room	Housekeeping Activity	Frequency							
		DAILY (5 DAYS)	DAILY (7 DAYS)	ALTERNATE DAYS	WEEKENDS	WEEKLY	EVERY TWO WEEKS	MONTHLY	AS REQUIRED
I.C.U./C.C.U.	Sanitize Furnishings		X						
	Trash Removal		X						
	Clean Sink		X						
	Restock Paper and Soap								X
	Spot Clean Walls								X
	Clean Interior Glass								X
	Damp Mop Floor		X						
	Vacuum Carpet		X						
	Machine Scrub								X
Laboratory	Clean Sinks		X						
	Trash Removal		X						
	Restock Paper and Soap								X
	Clean Interior Glass								X
	Spot Clean Walls								X
	Clean Autopsy Room								X
	Damp Mop Floor								X
Bacteriology Section	Wet Mop Floor	X							
Labour Room	Damp Dust Furnishings		X						
	Trash Removal		X						
	Clean Sinks								X
	Restock Paper and Soap								X

Area, Dept., or Room	Housekeeping Activity	Frequency							
		DAILY (5 DAYS)	DAILY (7 DAYS)	ALTERNATE DAYS	WEEKENDS	WEEKLY	EVERY TWO WEEKS	MONTHLY	AS REQUIRED
Labour Room (Cont'd)	Clean Wall Mounted T.V.						X		
	Clean Bed Light						X		
	Dry and Damp Mop Floor		X						
Laundry									
a) 'Soiled' Side	Dust Pipes, etc.								X
	Wet Mop Floor	X							
	Machine Scrub								X
b) 'Clean' Side	Dust Pipes, etc.								X
	Dry Mop Floor	X							
	Wet Mop Floor			X					
Lobby	Dust Furnishings		X						
	Trash Removal		X						
	Empty Ashtrays		X						
	Dry Mop Floor		X						
	Damp Mop Floor			X					
	Vacuum Carpet		X						
	Machine Scrub								X
Morgue	Wet Mop Floor (after use)								X

Area, Dept., or Room	Housekeeping Activity	Frequency							
		DAILY (5 DAYS)	DAILY (7 DAYS)	ALTERNATE DAYS	WEEKENDS	WEEKLY	EVERY TWO WEEKS	MONTHLY	AS REQUIRED
Nursery	Damp Dust Furnishings		X						
	Clean Sinks		X						
	Trash Removal		X						
	Restock Paper and Soap								X
	Clean Interior Glass								X
	Clean Bassinets after discharge								X
	Damp Mop or Wet Mop Floor		X						
	Machine Scrub								X
Nursing Station	Damp Dust Furnishings								X
	Trash Removal		X						
	Spot Clean Walls								X
	Clean Interior Glass								X
	Clean Sinks		X						
	Restock Paper and Soap								X
	Dry and Damp Mop Floor								X
	Machine Scrub								X
Offices	Trash Removal	X							
	Empty Ashtrays			X					
	Dust Furnishings			X					
	Spot Clean Walls								X
	Dry and Damp Mop Floor or			X					
	Vacuum Carpet			X					
	Machine Scrub								X

Area, Dept., or Room	Housekeeping Activity	Frequency							
		DAILY (5 DAYS)	DAILY (7 DAYS)	ALTERNATE DAYS	WEEKENDS	WEEKLY	EVERY TWO WEEKS	MONTHLY	AS REQUIRED
'On-Call' Rooms	Make Bed								X
	Dust Furnishings								X
	Clean Sink								X
	Restock Paper and Soap								X
	Dry and Damp Mop Floor or Vacuum Carpet								X
									X
Operating Suite	Theatres:								
N.B. Housekeeping work in the Operating Suite would normally be restricted to those days the suite is in use.	a) Between Cases - Sanitize Operating Table & Lights								X
	Wet Mop Floor								X
	b) End of Day - Sanitize Furnishings	X							
	Trash Removal	X							
	Spot Clean Walls	X							
	Flood Floor & Vacuum Pick-Up	X							
	Machine Scrub Floor					X			

Area, Dept., or Room	Housekeeping Activity	Frequency							
		DAILY (5 DAYS)	DAILY (7 DAYS)	ALTERNATE DAYS	WEEKENDS	WEEKLY	EVERY TWO WEEKS	MONTHLY	AS REQUIRED
Operating Suite (Cont'd)	Other Areas Within Suite:								
	Sanitize Furnishings	X							
	Trash Removal	X							
	Spot Clean Walls	X							
	Clean Sinks	X							
	Restock Paper, Soap & Other Supplies								X
	Wet Mop Floors	X							
Patient Rooms	Damp Dust Furnishings		X						
	Trash Removal		X						
	Clean Sinks		X						
	Restock Paper & Soap								X
	Clean Wall Mounted T.V.					X			
	Spot Clean Walls								X
	Dry and Damp Mop Floor		X						
Patio	Trash Removal								X
	Vacuum or Sweep								X
	Maintain Furnishings								X
	Remove Moss								X

Area, Dept., or Room	Housekeeping Activity	Frequency							
		DAILY (5 DAYS)	DAILY (7 DAYS)	ALTERNATE DAYS	WEEKENDS	WEEKLY	EVERY TWO WEEKS	MONTHLY	AS REQUIRED
Pharmacy	Clean Sinks	X							
	Trash Removal	X							
	Restock Paper and Soap								X
	Spot Clean Walls								X
	Clean Equipment (where applicable)								X
	Dry Mop Floor	X							
	Damp Mop Floor			X					
	Machine Scrub								X
Physiotherapy/O.T.	Dust Furnishings	X							
	Trash Removal	X							
	Clean Sinks	X							
	Restock Paper and Soap								X
	Change Privacy Curtains								X
a) Day Care Areas	Damp Dust Plinths, Mattresses & Floor Mats	X							
	Dry Mop Floor	X							
	Damp Mop Floor			X					
	Machine Scrub								X

Area, Dept., or Room	Housekeeping Activity	Frequency							
		DAILY (5 DAYS)	DAILY (7 DAYS)	ALTERNATE DAYS	WEEKENDS	WEEKLY	EVERY TWO WEEKS	MONTHLY	AS REQUIRED
Physiotherapy/O.T. (Cont'd) b) Hydro Area	Sanitize Hydro Therapy Equipment (ex. swimming pool) and ancillary areas	X							
	Damp Mop Floors	X							
	Spray & Vacuum Pick-Up Machine Scrub	X							X
Quiet Room	Dust Furnishings			X					
	Trash Removal								X
	Vacuum Carpet			X					
Radiology	Clean Sinks	X							
	Trash Removal	X							
	Restock Paper and Soap								X
	Clean Interior Glass								X
	Spot Clean Walls								X
	Dry Mop Floor	X							
	Damp Mop Floor			X					
	Machine Scrub								X

Area, Dept., or Room	Housekeeping Activity	Frequency							
		DAILY (5 DAYS)	DAILY (7 DAYS)	ALTERNATE DAYS	WEEKENDS	WEEKLY	EVERY TWO WEEKS	MONTHLY	AS REQUIRED
Serving Kitchens in Patient Areas	Damp Dust Furnishings		X						
	Trash Removal		X						
	Clean Sinks		X						
	Restock Paper and Soap								X
	Spot Clean Walls								X
	Clean Refrigerator Inside and Outside								X
	Dry and Damp Mop Floor		X						
	Machine Scrub								X
Stairways	Dry and Damp Mop Stair Heads, Risers & Landings	X							
	Damp Dust Hand Railings								X
Storage Rooms									
a) In-Patient Areas	Clean Shelving								X
	Dry Mop Floor		X						
	Damp Mop Floor			X					
	Machine Scrub								X
b) In-Service Areas	Clean Shelving								X
	Dry Mop Floor					X			
	Damp Mop Floor							X	
	Machine Scrub								X

Area, Dept., or Room	Housekeeping Activity	Frequency							
		DAILY (5 DAYS)	DAILY (7 DAYS)	ALTERNATE DAYS	WEEKENDS	WEEKLY	EVERY TWO WEEKS	MONTHLY	AS REQUIRED
Training/Lecture	Dust Furnishings								X
	Dry Mop Floor			X					
	Damp Mop Floor or Vacuum Carpet			X					X
Utility Rooms	Clean Bed Pan Sterilizer (where applicable)		X						
	Sanitize Furnishings		X						
	Clean Sinks		X						
	Trash Removal		X						
	Restock Paper and Soap								X
	Spot Clean Walls								X
	Wet Mop Floor		X						
	Machine Scrub								X
Washrooms and/or Bathrooms	Clean Fixtures		X						
	Trash Removal		X						
	Restock Paper and Soap								X
	Spot Clean Walls & Partitions								X
	Damp Mop Floor		X						
	Machine Scrub					X			

SECTION 6

MEMBERS OF THE FEDERAL/PROVINCIAL SUB-COMMITTEE ON PRODUCTIVITY DEVELOPMENT

FEDERAL/PROVINCIAL SUB-COMMITTEE ON PRODUCTIVITY IMPROVEMENT

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NOTES

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Santé et Bien-être social Canada

National Hospital Productivity Improvement Program

Canada

NATIONAL HOSPITAL PRODUCTIVITY IMPROVEMENT PROGRAM

OPERATING ROOM WORKLOAD MEASUREMENT SYSTEM and STAFFING METHODOLOGY

Health Services Directorate
Health Services and Promotion Branch

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SECTION 1

1 General Information
1.1 Background
1.2 Operating Room Workload Measurement System and Staffing Methodology
1.3 Federal/Provincial Sub-Committee on Productivity Improvement

OPERATING ROOM
WORKLOAD MEASUREMENT SYSTEM
AND
STAFFING METHODOLOGY

1. General Information

A staffing methodology is a pre-defined step-by-step method for measuring manpower requirements and is highly dependent on accurate workload measurement. Flexibility is usually a built-in provision in staffing methodologies (S.M.) to allow for variances and individual differences in departmental operations.

Historically, priority was given to the development of workload measurement systems (W.M.S.). Given that staffing methodologies are based and dependent on the measurement of work volumes, the reasoning behind this prioritization becomes apparent. However, now that a number of workload measurement systems have been implemented on a national basis and several others are in the development stage, resources have been made available for the development of staffing methodologies. The following section gives a brief historical background on the development of W.M.S. and the events that brought about the development of the Operating Room Workload Measurement System and Staffing Methodology.

1.1 Background

Hospitals are complex organizations enveloping a broad range of staff and activity and as such, they are a challenge to manage and control. Moreover, as costs rise in periods of fiscal restraint, productivity improvement becomes important to hospital administrators, department heads and governments alike. It is in this light that impetus was given to the development of systematic workload recording/reporting systems and staffing methodologies in various specialty areas/departments to provide uniform and reliable workload measurement to assist in staffing, budgeting, planning, quality assurance, etc.

Documentation of the activity of health care providers is required to ensure that resources are distributed and utilized appropriately. To this end, major efforts have been made to develop appropriate W.M.S. Workload measurement in Canadian hospitals dates back to 1931 with federal government legislation requiring all hospitals to record and return data relating to hospital activity. Subsequent to this, professional associations became involved in the development of workload measurement systems in their respective specialty areas. The Canadian Association of Pathologists (C.A.P.) was the first

professional association to work with the Dominion Bureau of Statistics (Statistics Canada), with funding provided through a National Health grant to develop a W.M.S. for implementation in 1954.

In 1969, the Canadian Physiotherapy Association (C.P.A.) had developed a workload measurement system of their own through a grant from Health and Welfare Canada. The methodology for the system took on a much different approach than that of the C.A.P. system due to the nature of their work.

In 1971, through a N.H.R.D.P. grant, the Canadian Association of Occupational Therapists in collaboration with the C.P.A. had developed, the "Canadian Schedule of Unit Values for Physiotherapy and Occupational Therapy". Towards the end of the decade, separate and expanded manuals were developed which included productivity and utilization indicators for managers.

In 1975, Health and Welfare Canada, in cooperation with the provinces, formed the Federal-Provincial Steering Committee on Workload Measurement Systems whose mandate was to direct the promotion, development, and maintenance of workload measurement systems. In parallel, the Federal-Provincial Sub-Group on Staffing Methodologies and Guidelines was formed in 1981.

1.2 Operating Room W.M.S./S.M.

Today, both of these groups have been merged to form the Federal-Provincial Sub-Committee on Productivity Improvement (see section 1.3). This committee identified priority areas in developing workload measurement systems and staffing methodologies, of which, the operating room was one. It was in this light that the Sub-Committee promoted the development of the Operating Room W.M.S./S.M. on the basis of a contract between Health and Welfare Canada and the Greater Vancouver Regional Hospitals Management Engineering Unit 13-2.

1.3 Federal-Provincial Sub-Committee on Productivity Improvement

The Sub-Committee on Productivity Improvement reports to the Federal/Provincial Advisory Committee on Institutional and Medical Services. Responsibilities include overseeing the National Hospital Productivity Improvement Program which currently involves the development of a number of workload measurement systems/staffing methodologies for various hospital specialty areas/departments.

1.3.1 Terms of Reference

The SUB-COMMITTEE ON PRODUCTIVITY IMPROVEMENT is responsible for directing and coordinating the ongoing National Hospital Productivity Improvement Program, established on a cooperative Federal-Provincial basis.

Major facets of the program include the development, promotion, evaluation, maintenance and funding of Workload Measurement Systems and Staffing Methodologies. Other functions inherent in the Sub-Committee's mandate includes the liaison with professional associations, the provision of assistance to such organizations in the assessment of their requirements relative to the National Hospital Productivity Improvement Program, and the preparation, testing, publication, education and implementation of Workload Measurement Systems in the field.

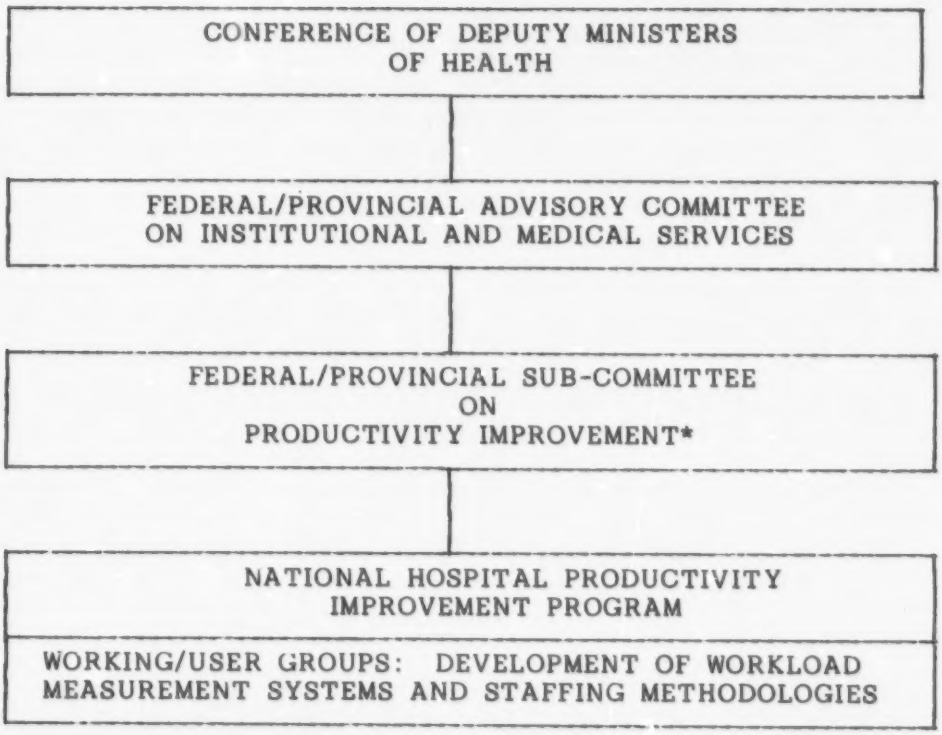
The Committee comprises representatives from Health and Welfare Canada, provincial health authorities, the Canadian Hospital Association, hospitals, the Toronto Institute of Medical Technology and Statistics Canada (see Appendix C for list of members).

The task of developing specific workload measurement systems and of providing ongoing systems maintenance is primarily being carried out by nationally representative WORKING GROUPS predominantly comprising health professionals drawn from the relevant national professional organizations.

In addition, selected W.M.S./S.M. are developed through a direct contribution of health organizations or under contract by recognized specialists in the health care sector in collaboration with advisory groups.

Health and Welfare Canada provides overall program co-ordination. Statistics Canada is responsible for the provision of national statistics through the "Annual Return of Health Care Facilities" and the "Quarterly Hospital Information System".

1.3.2 Organization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FEDERAL/PROVINCIAL ADVISORY COMMITTEE ON INSTITUTIONAL AND MEDICAL SERVICES
FEDERAL/PROVINCIAL SUB-COMMITTEE ON PRODUCTIVITY IMPROVEMENT*
NATIONAL HOSPITAL PRODUCTIVITY IMPROVEMENT PROGRAM
WORKING/USER GROUPS: DEVELOPMENT OF WORKLOAD MEASUREMENT SYSTEMS AND STAFFING METHODOLOGIES

* Program Coordination provided by:

Health Services Directorate,
Health and Welfare Canada

SECTION 2

2 Introduction
2.1 Basic Assumptions

2. Introduction

The Operating Room W.M.S. and S.M. is a tool to be employed in determining the required staff complement necessary to carry out a specific number of surgical procedures which are arranged according to a specific case mix. The methodology is retrospective in nature in that it provides for the comparison of the actual use of staff to a staff requirement defined by the methodology.

The cornerstone of the methodology is the classification of the surgical caseload into different categories of "skin to skin times"[1]

The general approach in developing the methodology was to first identify all activities performed by all levels of operating room staff, relating directly or indirectly to the performance of a surgical procedure. Time studies were then conducted to develop average time values for each activity. The next key step was to simply apply the average time values to a specific caseload categorized according to 7 categories of "skin to skin" time to arrive at the total hours of staffing necessary to carry out a specific caseload. The underlying assumption, therefore, is that the length of many activities is linked to that of the case.

---

[1] *Skin-to-skin time is defined as the period of time which elapses between the first incision into the skin and the insertion of the last skin suture or staple. The skin to skin time categories are as follows:*

- *Category I: less than 30 minutes*
- *Category II: 30 to 49 minutes*
- *Category III: 50 to 69 minutes*
- *Category IV: 70 to 94 minutes*
- *Category V: 95 to 124 minutes*
- *Category VI: 125 to 180 minutes*
- *Category VII: over 180 minutes*

The methodology, based on this assumption, states that each surgical case will generate variable times[2] for each identifiable activity. In addition to generating variable time, each surgical procedure also generates constant time[3]. Since it was determined that

---

[2] *VARIABLE TIME: Covers those activities which are directly related to the performance of a procedure, such as readying supplies for the case, admitting the patient, assisting the surgeon, cleaning instruments and operating room etc... As an integral component of a procedure, the number and length of procedures derives the amount of variable time incurred.*

- *Direct nursing care: Includes those hands-on functions which are felt to require the special training and skills of operating room nurses. More specifically those include:*

- *Pre-op assessment of patient needs*
- *Admit patient to O.R.*
- *Prepare patient for anaesthesia and surgery*
- *Assist surgeon(s) with procedure*
- *Prepare patient for transfer back to bed*
- *Move patient off table*
- *Transport patient to P.A.R./(Post-Anaesthetic Recovery Room) or unit*
- *Report to P.A.R./unit nurse.*

- *Support functions: Inciude those activities performed by any level of staff in preparation for a surgical procedure. Support functions include the following:*
- *Ready supplies for case*
- *Transport patient to O.R.*
- *Set-up case.*

- *Ancillary functions: Include those activities performed by any level of staff to clean up the physical O.R. environment after a procedure and return it to its normal "ready" state. More specifically these include:*

- *Dismantle case*
- *Process instruments*
- *Clean-up equipment/furniture*
- *Clean-up floor.*

[3] *CONSTANT TIME: Covers those activities which are performed for the benefit of all present and future patients, which cannot easily be identified or measured for a specific patient, (i.e. clerical functions, administration, supervision, general management, and routine duties).*

constant time also relates closely to the size of the surgical suite (the number of O.R.'s which have to be kept open), it was decided to calculate constant time in "room-days"[4].

Separate times are provided for each activity so as to allow hospitals to choose from different operational options, thus tailoring the methodology to better reflect department specific requirements.

It should be noted that the methodology identifies the total hours required to meet a specific caseload in a given reporting period and does not identify categories of staff and link them to specific categories of activities . This is an intentional ommission since labour laws and traditional operational concepts vary from province to province (refer to section 4 for suggested method for linking specific activities to specific staff categories).

2.1 BASIC ASSUMPTIONS

2.1.1 Number of Nurses required per case

It is recommended that each case, regardless of its duration or expected degree of complexity, be staffed by a minimum of two nurses. This guideline is based upon the fact that each physician member of the surgical team (i.e. anaesthetist(s) and surgeon(s) needs to be supported. The scrub nurse, because of the fact that she has scrubbed, is limited, (except in extraordinary circumstances) in her ability to leave the sterile field to assist the anaesthetist or to secure additional equipment or supplies needed for the case. The circulating nurse's role is one of leadership as she provides assistance needed outside the sterile field (i.e. assist the anaesthetist and provide supplies as necessary during the course of the procedure). In cases not requiring scrub nurses (such as most scoping procedures) we still recommend that two circulating nurses be present using the same assumption that both anaesthetist and surgeon need to be supported and that, in the case of an emergency, each needs the individual support of a competent person who can efficiently meet their and the patient's needs.

---

[4] *ROOM-DAY: It is a measure of the level of activity in a surgical suite. It expresses the number of total days per reporting period when operating rooms are in use for scheduled interventions. During a 24-hr. period, any room in use for less than 4 hours constitutes ½ a room-day. Any room in use from 4 to 8 hours constitutes 1 room-day. A room scheduled for 10 hours of operation would constitute 1½ room-days.*

2.1.2 Additional staffing

Cases, (independent of their length), requiring more than routine positioning, skin preparation, or specimen care, will require that additional help be available at various times during the surgical intervention. Although no staffing guidelines are provided for these activities, their time value has been assessed and incorporated into the time standards.

2.1.3 Infection control measures

The protection of the integrity of the surgical environment which guarantees the safety of the patient and the staff requires that certain guidelines be applied, even though they might ultimately result in increased overall time values for specific activities.

2.1.3.1 Separation of cases

No staff should be providing hands-on care to more than one patient at a time without applying strict decontamination measures. The danger of cross-contamination through staff or equipment precludes the practice of using a nurse to circulate for two simultaneous cases. Similarly, staff brought in on a case to provide additional help with positioning or skin preparation, (see 2.1.2), should be required to wear protective apparel and use proper hand washing techniques prior to entering and upon leaving the operating room.

2.1.3.2 Separation of "clean" vs. "dirty" ancillary activities

Staff assigned to "dirty" areas of the surgical suite, (for instance the utility room), should not relieve staff working in "clean" areas, (i.e. sterile core), without wearing protective apparel and using scrupulous hand-washing techniques.

2.1.4 Staff presence

The role of nurses in the O.R. is to provide nursing care by assisting in the performance of a surgical procedure and anticipating the needs of the patient and the surgical team. The circulating nurse in particular, not having scrubbed and thus free to move, must be available at all times during the procedure to provide assistance as needed and to be ready to cope with any emergency which might arise. It is imperative, therefore, that she remain in the operating room at all times during the entire duration of the intervention.

SECTION 3

3. USER'S GUIDE
3.1 Summary of Required Approach
3.2 Data Collection Forms and Tables
3.3 Step by Step Implementation

3. USER'S GUIDE

3.1 Summary of Required Approach

The initial implementation of the methodology requires the completion of 4 tasks:

- **TASK I** involves customizing the average variable time value per case for your hospital by using Table I (Variable Time Values) to fill in Form II (Variable Time Calculation) selecting applicable options. A brief description of each form is presented in Section 3.2.

- **TASK II** involves customizing the average Constant Time Values per room-day for your hospital by using Form III (Constant Time Calculation) to select applicable options.

TASKS I AND II ARE PART OF THE INITIAL VALIDATION OF THE DATA BASE FOR YOUR HOSPITAL, AND WILL NOT NEED TO BE REPEATED EVERY REPORTING PERIOD. ONLY WHEN OPERATIONAL CHANGES OCCUR, WHICH SIGNIFICANTLY AFFECT THE TIME VALUES PER CATEGORY, WILL THE DATA BASE NEED TO BE REVISED.

One example of such change could be the creation of a Central Portering System which would dedicate 2 porters to the O.R., but remove them from the O.R. budget.

- **TASK III** involves the classification of the surgical caseload into the seven (7) categories of skin-to-skin time using Form I: Data Collection, and

- **TASK IV** involves the filling out of the Workload Report, using the number of cases in each category as classified on Form I, and the variable time value per case, and constant time value per room-day, as determined on Forms II and III.

TASKS III AND IV HAVE TO BE PERFORMED FOR EVERY REPORTING PERIOD.

3.2 Data Collection Forms and Tables

Initial implementation of the methodology will require the use of 4 forms and 1 Variable Time Values Table. For each subsequent application, Forms II and III will not be required since the hospital-specific data base for variable and constant time values have been established.

A brief description of each form is presented below and is followed by a step by step description of the 4 tasks required in implementing the methodology.

Form I: Data Collection Form (p.53) is to be used to tabulate and categorize the surgical caseload into the seven (7) categories of skin-to-skin time. This tabulation is the basis upon which the variable time is calculated. It is important to record this information in a way that identifies procedures performed during regular hours of operation and those performed after regular hours and/or on weekends, or at anytime when the O.R. is available on an "emergency" rather than "scheduled" basis.

Table I: Variable Time Values (pages 51 and 52). These values are to be used by each user hospital to develop their own average time per category by choosing the appropriate options and adding the corresponding time values. Form II on pages 54 and 55 is to be used to perform that calculation.

Form II: Variable Time Calculation, pages 54 and 55, allows each hospital to determine the total staff hours required per case in each category by adding the time values applicable to its own operational system. For instance, Hospital X keeps some supplies decentralized into its operating room, and uses two (2) porters to transport patients. Therefore, on Form II, Hospital X will enter values of 2.0 to 2.1 under Ready supplies for case: Supplies decentralized in O.R., and values of 22.3 in each category under Transport patient to O.R.: Transport with two porters (see page 51).

Form III: Constant Time Calculation (pages 56 and 57). The purpose of this form is to determine the number of hours of constant time expended during the reporting period. The average time values given to each activity (or group of activities) represent the hours (or tenths of hours) spent on the activity during one (1) room-day. (For an explanation of the room-day concept, see page 9).

Form IV: Workload Report (page 58) is the summary and the actual outcome of the Staffing Methodology. It is filled in for every reporting period, using the time values developed by the Variable and Constant time calculations made on Forms II and III, and the number of cases in each time category as defined on Data Collection Form I.

In practice, only Form IV, the Workload Report, will need to be filled out regularly for each reporting period as defined by individual user hospitals. The initial application will require more effort and involvement since the user will be asked to develop the total hours per case customized for his own hospital using the time values and

operational options identified in Forms II and III. Once established however, the calculation sheets will only need to be readjusted when basic operational concepts are changed. These calculation sheets will form the data base which will be used to fill out the Workload Report.

It is recognized that some activities may not be consistently performed according to the same option or that certain functions (such as portering, housekeeping, etc...) are carried out by personnel dedicated to the O.R. but not on its budget. One example of the former would be transporting orthopedic surgical patients with 2 porters, all others with 1. The methodology provides a mechanism for dealing with these changes in the system. See pages 36 and 37.

The end goal of the methodology is to produce a final figure referred to as:

****
* STANDARD HOURS OF WORK REQUIRED PER *
* REPORTING PERIOD[5] *
****

which represents the number of hours that should have been used during the reporting period for your particular hospital. This figure does not include allowances for vacation, sick time, and other hours which may be paid but not worked. The methodology however, does include a 15% allowance for personal, fatigue and delay time (P.F. & D.) which includes coffeebreaks. Standard hours are to be compared to hours actually worked.

In this methodology, for a specific reporting period, the total hours arrived at by case in each category, are multiplied by the number of cases in that category to arrive at the total variable hours required. For that same reporting period, total constant hours can be determined by multiplying the constant hours per room-day by the number of room-days. By adding total variable and total constant hours and multiplying the result by the 15% P.F. & D. factor, the total standard hours for that period can be arrived at.

---

5 *Standard Hours: represent the number of hours that should have been taken to perform a specific workload. They do not represent a real, but rather a hypothetical situation, using time values developed for each activity, and adding all the values to arrive at a total time. The standard hours concept recognizes that unproductive time does occur, and that, as the day wears on, fatigue might cause some activities to take longer to perform than they did earlier in the day. Therefore, Standard hours includes a 15% Personal, Fatigue and Delay Factor (P.F. & D.).*

Hours per case X # of cases in each category = total variable hours

Hours per room-day X # room-days in period = total constant hours

Total variable + total constant hours + 15% PFD = total standard hours.

The standard hours (to which are added a change-over allowance) can then be divided by the number of room hours available to determine the O.R. utilization rate (page 23). Because the utilization rate is usually much higher during regular hours of operation than during evening, night and weekend shifts when the O.R. may be operated on an emergency basis only, 2 Workload Reports should be developed for each reporting period:

- one for regularly scheduled caseload, and
- one for "emergency" (unscheduled) cases

This requires that Form I, Data Collection, be filled in to reflect the number of cases performed during regular versus after hours.

Failure to develop two Workload Reports to account for all the cases in a reporting period will probably result in an unrealistically low overall utilization rate since in most facilities, regular shifts are much busier than after hours shifts.

The following formula can be used to determine the staffing necessary to carry out the workload for a specific reporting period.

Total Standard Hours per period ÷ # hours in shift

= # of shifts to be staffed per period

To this figure, an allowance should be added to reflect paid but not worked hours. Since that ratio usually varies between institutions and provinces each hospital should contact their Accounting Department to determine the proper ratio to be used.

3.3 Step By Step Implementation

3.3.1 Task I: Customize Variable Time Values

o Step I: Fill in Variable Time Calculation Form Title Block

Fill in the current date, when the Variable Time Calculation form was last revised and the name of the person doing the current revisions.

o Step II: Select Operational Options and Apply Standard Times

Using the average time values on Table I: VARIABLE TIME VALUES, customize your hospital's data base by choosing the activities applicable to your hospital and entering the time values on the appropriate lines on Form II. Since the terminology used to define different activities may not be consistent between different provinces, it is suggested that you refer frequently to the Activity Descriptions (pp. 41 to 47) while using the Guide to ensure a thorough understanding of the functions included under each activity heading and sub-heading.

The methodology provides the flexibility to use one or the other of the operational options available, depending upon the type of activity. For instance, if your hospital keeps all sterile supplies located in one area within the surgical suite, and if all specialty instruments are processed outside of the suite, enter on Form II, line 2, the values of 2.8 to 6.0 minutes for categories 1 through 7, to the exclusion of any other values on lines 3 or 4. Activities which are not consistently carried out in the same manner can also be accounted for by using a percentage method described in detail on pages 36 and 37.

Ready Supplies for Case refers to gathering all instruments and linen bundles and supplies necessary to carry out a surgical case.

(a) Supplies centralized in O.R.: If sterile bundles and supplies are stored centrally in one location within the suite, enter the time values listed in Table I, line 1, on Form II, line 1. DO NOT ENTER TIME VALUE FOR OPTION b (line 2).

(b) Supplies decentralized in O.R.: If sterile bundles and supplies are stored in more than one location within the suite, enter the time values listed in Table I, line 2, on Form II, line 2. DO NOT ENTER TIME VALUE FOR OPTION a (line 1).

The observations carried out for project revealed that often some supplies are stored within each operating room (i.e. sutures, dressings, etc...) and are retrieved as needed during the surgical procedure by the circulating nurse. Because this type of activity is accounted for within the skin-to-skin time value (as an activity carried out by the circulating nurse) notice that the value for option "b" is shorter than option "a" for identical categories.

(c) Specialty instruments to be processed: If specialty instruments have to be sterilized by O.R. staff prior to a procedure, enter the time value from Table I, line 3, onto Form II, line 3, for each category. IF SPECIALTY INSTRUMENTS ARE ENTIRELY PROCESSED OUTSIDE THE O.R. AND DO NOT REQUIRE FURTHER HANDLING BY O.R. STAFF, DO NOT ENTER ANY TIME VALUE ON LINE 3.

Pre-Op Assessment of Patient Needs

(a) Visit patient: If pre-op visits are routinely accomplished, enter the time value for each case category from Table I, line 4 on Form II, line 4.

(b) Prepare Surgical Site: If site is prepared by O.R. staff on the ward or in the O.R., enter the time value for each case category from Table I, line 5 on Form II, line 5. DO NOT ENTER TIME VALUE IF SITE IS PREPARED BY WARD STAFF.

Transport Patient to O.R.

(a) Transport with one porter: If the patient move is accomplished using one porter, enter the time value for each category from Table I, line 6 on Form II, line 6.

(b) Transport with two porters: If the patient move is accomplished using two porters, enter the time value for each case category from Table I, line 7 on Form II, line 7. DO NOT ENTER TIME VALUE FOR OPTIONS "a" OR "b" IF THE PATIENT MOVE IS ACCOMPLISHED BY WARD STAFF.

Set-Up Case

(a) Transport supplies/open bundles: Enter the time value in each case category from Table I, line 8 on Form II, line 8.

(b) Organize sterile set-up: Enter the time value for each case category from Table I, line 9 on Form II, line 9.

(c) Organize unsterile set-up: Enter the time value for each case category from Table I, line 10 on Form II, line 10.

Admit Patient to O.R.: If surgical patients are routinely admitted by the circulating or holding room nurse, enter the time value for each case category from Table I, line 11 on Form II, line 11.

Prepare Patient for Anaesthesia/Surgery: Enter time value for each case category from Table I, line 12 on Form II, line 12.

Assist Surgeon(s) with Procedure: Enter the time value for each case category from Table I, line 13 on Form II, line 13. DO NOT ADJUST THESE VALUES BY TIME STUDY. THESE TIME VALUES REFLECT THE SKIN-TO-SKIN TIME AND THE NUMBER OF NURSING STAFF INVOLVED.

Prepare Patient for Transfer to Bed: Enter the time value for each case category from Table I, line 14 on Form II, line 14.

Transfer Patient Off Table: Enter the time value for each case category from Table I, line 15 on Form II, line 15.

Transfer Patient to P.A.R./Unit: If the patient is accompanied to the P.A.R./unit by O.R. staff other than the surgeon or the anaesthetist, enter the time value for each case category from Table I, line 16 on Form II, line 16.

Report to P.A.R./Unit Nurse: If a report is made to the P.A.R. or unit nurse by O.R. staff other than the surgeon or the anaesthetist, enter the time value for each case category from Table I, line 17 on Form II, line 17.

Dismantle Case: Enter the time value for each case category from Table I, line 18 on Form II, line 18.

Process Instruments

(a) Totally processed in C.S.D.: If instruments are totally processed in C.S.D. with no involvement by O.R. staff beyond taking them from the operating rooms to a pick-up point, enter the time value in each case category from Table I, line 19 on Form II, line 19. DO NOT ENTER TIME VALUE FOR OPTION "b" OR "c".

(b) Partially processed in C.S.D.: Enter the time value for each case category from Table I, line 20 on Form II, line 20. DO NOT ENTER TIME VALUE FOR OPTION "a" OR "c".

(c) Totally processed in O.R.: If instruments are totally processed in the O.R. Suite, enter time value for each case category from Table I, line 21 on Form II, line 21. DO NOT ENTER TIME VALUE FOR OPTION "a" OR "b".

(d) Specialty instruments: If specialty instruments are processed by O.R. staff, enter time value for each category from Table I, line 22 on Form II, line 22.

Clean-up Equipment/Furniture: Enter the time value for each case category from Table I, line 23 on Form II, line 23.

Clean-up Floor

(a) One-bucket method: If hospital uses the one-bucket method for cleaning floors, enter the time value for each case category from Table I, line 24 on Form II, line 24. DO NOT ENTER TIME VALUE FOR OPTIONS "b" OR "c".

(b) Two-bucket method: If hospital uses the two-bucket method for cleaning floors, enter the time value for each case category from Table I, line 25 on Form II, line 25. DO NOT ENTER TIME VALUE FOR OPTIONS "a" OR "c".

(c) Wet/vacuum method: If hospital uses the wet/vacuum method for cleaning floors, enter the time value for each case category from Table I, line 26 on Form II, line 26. DO NOT ENTER TIME VALUE FOR OPTIONS "a" OR "b".

o Step III: Determine Total Minutes Per Case Category

Add the time values for each activity defined above to arrive at a total minutes required per case category. ENTER RESULTS ON FORM II, LINE 27.

o Step IV: Translate Minutes into Hours

Total minutes ÷ 60 = total hours. ENTER RESULTS ON FORM II, LINE 28, ALSO ENTER HOURS PER CASE FOR EACH CATEGORY ON FORM IV (WORKLOAD REPORT) LINES 1 THROUGH 7.

3.3.2 Task II: Customize Constant Time Values

o Step I: Fill in Constant Time Calculation Form Title Block

Fill in the date when the CONSTANT TIME CALCULATION form was last revised and the name of the person doing the current revisions.

o Step II: Develop Constant Time Values

Notice that each subcategory of constant activities includes a line for "other". This was provided so that individual hospitals can add activities specific to their operations.

General Administration

1 through 4. (Meetings, Staff matters, Data/reports and Staffing assignments):

Enter the time value of .4 hours per room day on Form III, Column 2, Line 3.

5. General supervision: If general supervision constitutes an identifiable part of the duties of staff members, enter the time value of .6 hours per room day on Form III, Column 2, Line 5.

Training and Education

7. In-service/orientation: Enter the time value of .2 hours per room day on Form III, Column 2, Line 7.

8. Formal training program: If your hospital is a teaching facility and offers one or more formal training program(s), enter the time value of .8 hours per room day, on Form III, Column 2, Line 8.

Clerical Duties

9. through 11. (Inventory, General Management and Slates): Enter the time value of 1.3 hours per room day on Form III, Column 2, Line 10.

12. Routine booking: If routine booking is done by O.R. staff, enter the time value of 1.3 hours per room day on Form III, Column 2, Line 12.

13. Emergency booking only: Enter the time of .2 hours per room day if O.R. staff books emergency cases only on Form III, Column 2, Line 13.

Routine Duties - Sterile Core

15 through 17. (Inventory, Cleaning, Rotate supplies): Enter the time value of .5 hours per room day, if applicable, on Form III, Column 2, Line 17.

Routine Duties - Utility Room

19 & 20. (Clean and Inventory): Enter the time value of .4 hours per room day, if applicable, on Form III, Column 2, Line 20.

Routine Duties - Anaesthetic Room

22 through 25. (Clean up, Restock Inventory, Process Tubes and Masks).

Enter the time value of .4 hours per room day, if applicable, on Form III, Column 2, Line 24.

Routine Duties - Holding Area

27. Bed/stretcher washing: Enter the time value of .4 hours per room day, if applicable, on Form III, Colulmn 2, Line 27.

Routine Duties - General Upkeep

29 through 31. (Inventory, Linen storage, Garbage/linen disposal): Enter the time value of .3 hours per room day, if applicable, on Form III, Column 2, Line 30.

32. Terminal room cleaning: Enter the time value of .6 hours per room day, if applicable, on Form III, Column 2, Line 32.

****
* Tasks I and II constitute the development of the methodology *
* data base. They are part of the initial implementation *
* process. Once the standard variable and constant time *
* values are established, they should remain unchanged and will*
* only need revision when operational systems are altered. *
****

With the completion of the development of your data base, you are now ready to fill out Form IV, WORKLOAD REPORT.

3.3.3 Task III: Classify Surgical Caseload

o Step I: Classify Surgical Caseload by Skin-to-Skin Time.

Collect surgical caseload data for the reporting period. **As shown on page 14,** this information can be found on any one of a number of O.R. documents: Log books, Count sheets, Operative Records, Anaesthetic Records etc... Using a form

similar to the one shown on the next page and referred to as Form I, classify each surgical procedure into one of the 7 Skin-to-Skin time categories.

```
**************************************************
* REMEMBER, YOU MUST USE SKIN-TO-SKIN            *
* TIME TO CLASSIFY THE CASELOAD.                 *
**************************************************
```

o Step II: Enter Number of Cases in each Category onto Workload Report

Tabulate the number of cases into each of the 7 Skin-to-Skin time categories and enter the result on Form IV, lines 1 through 7.

3.3.4 Task IV: Complete the Workload Report

```
**************************************************
* THE WORKLOAD REPORT MUST BE COMPLETED          *
* FOR EVERY REPORTING PERIOD                     *
**************************************************
```

o Step I: Fill in the Title Block

- Enter the date of filing of the Workload Report.
- Enter the period for which report is filed. The choice of the reporting period is up to the user hospital but should include at least 200 cases (See page 35).
- Enter the name of the person preparing the report.
- Enter the number of surgical cases performed during the reporting period.
- Enter the total hours of surgery (skin-to-skin time) incurred during the reporting period.
- Determine the O.R. utilization by dividing the total available room hours during the reporting period by the total hours of surgery to which are added an allowance for change-over time. Available room hours are defined as the number of hours during which operating theatres are set up and staffed, and ready to accomodate patients.

[(Skin-to-Skin time + change over) ÷ total room hours available] x 100 = % O.R. Utilization.

FORM I DATE DAILY CASE CATEGORY LOG HOURS _____

CASE CATEGORY																									TOTAL
LESS THAN 30 MINUTES - CAT. I																									
30 - 49 MINUTES CAT. II																									
50 - 69 MINUTES CAT. III																									
70 - 94 MINUTES CAT. IV																									
95 - 124 MINUTES CAT. V																									
125 - 180 MINUTES CAT. VI																									
MORE THAN 180 MINUTES - CAT. VII																									

o Step II: Calculate Variable Hours

Lines 1 through 7: Enter the HOURS PER CASE for each category from Form II, Line 28.

Lines 1 through 7: Enter the CASES PER PERIOD for each category from Form I.

Lines 1 through 7:- For each case category, determine the VARIABLE HOURS by multiplying HOURS PER CASE by CASES PER PERIOD.

Line 8: - Add VARIABLE HOURS for each case category to determine TOTAL VARIABLE HOURS for the reporting period.

o Step III: Calculate Constant Hours

Lines 9 through 13- Enter HOURS PER ROOM-DAY for each category of activities from Form III, Column 2. The value to be entered in the ROUTINE DUTIES box is a combination of the sub-totals of the constant times for routine duties in the sterile core, utility room, anaesthetic room, holding area and general upkeep, pages 56 and 57.

Line 14: Determine TOTAL CONSTANT HOURS by adding CONSTANT HOURS for each category of activity.

o Step IV: Calculate Standard Hours

Line 15: Add TOTAL VARIABLE HOURS and TOTAL CONSTANT HOURS.

Line 16: Determine P.F.D. ALLOWANCE by taking 15% of Line 15.

Line 17: Determine STANDARD HOURS PER PERIOD by adding Lines 15 and 16 (refer to definition on page 15).

o Step V: Calculate Worked Hours

Lines 18 through 21: Determine WORKED HOURS for each category of O.R. personnel, as applicable, by reviewing the payroll record for the reporting period. Caution should be exercised in determining worked hours when reviewing the payroll record, since an hour may be

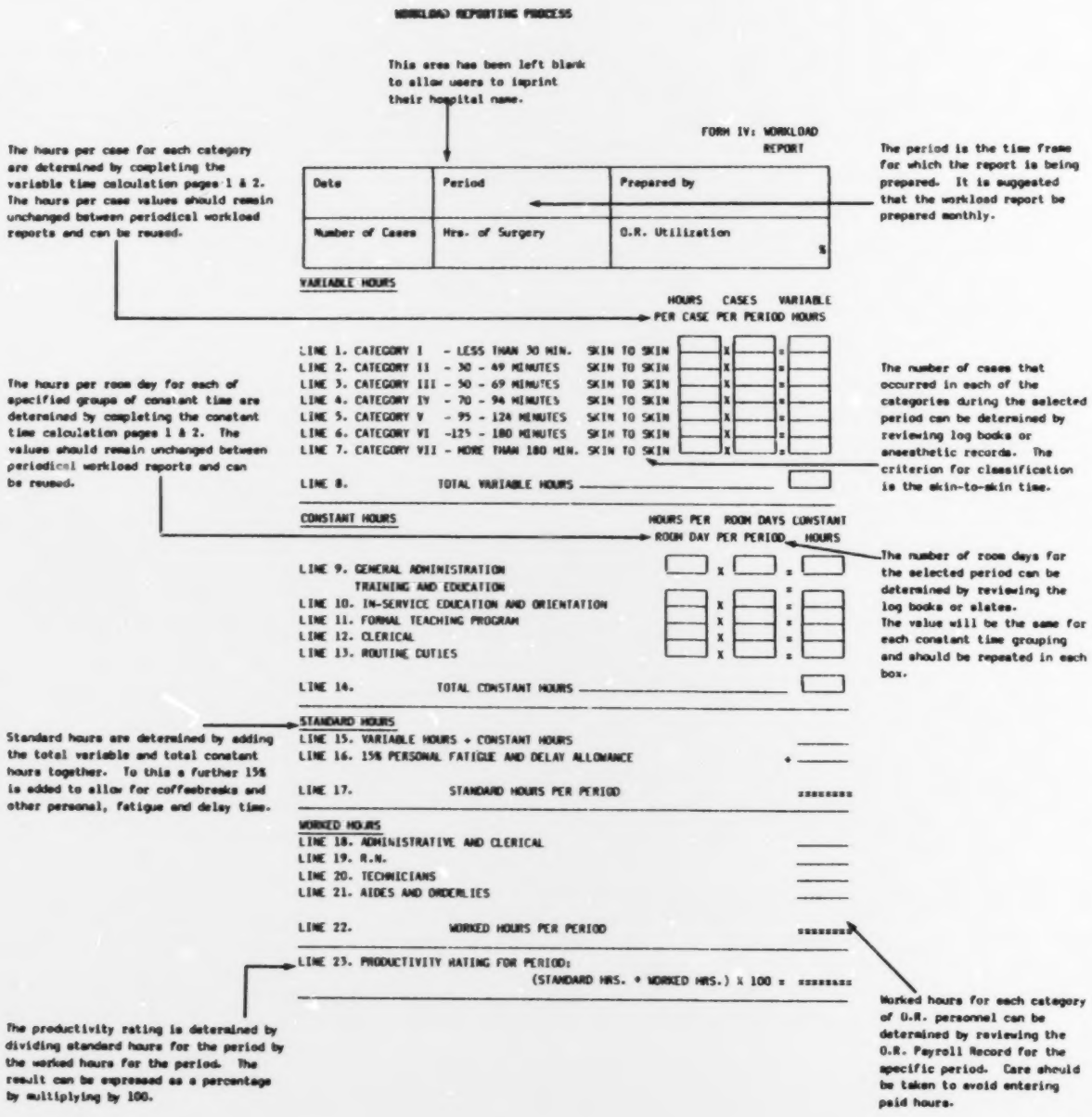
paid but not worked. For example, 2 hours of overtime at time and a half would result in 3 paid hours but only 2 worked hours (refer to definition on page 16).

Line 22: Determine TOTAL WORKED HOURS PER PERIOD by adding worked hours for each category of staff.

o Step VI: Calculate Productivity Rating

Line 23: Determine PRODUCTIVITY RATING (expressed as a percentage) by dividing standard hours by worked hours and multiplying the result by 100.

The Workload Reporting Process chart on the next page summarizes the steps necessary to fill out the Workload Report.


WORKLOAD REPORTING PROCESS
This area has been left blank to allow users to imprint their hospital name.
FORM IV: WORKLOAD REPORT
The hours per case for each category are determined by completing the variable time calculation pages 1 & 2. The hours per case values should remain unchanged between periodical workload reports and can be reused.
The period is the time frame for which the report is being prepared. It is suggested that the workload report be prepared monthly.
Date
Period
Prepared by
Number of Cases
Hrs. of Surgery
O.R. Utilization
%
VARIABLE HOURS
HOURS PER CASE
CASES PER PERIOD
VARIABLE HOURS
LINE 1. CATEGORY I - LESS THAN 30 MIN. SKIN TO SKIN
LINE 2. CATEGORY II - 30 - 49 MINUTES SKIN TO SKIN
LINE 3. CATEGORY III - 50 - 69 MINUTES SKIN TO SKIN
LINE 4. CATEGORY IV - 70 - 94 MINUTES SKIN TO SKIN
LINE 5. CATEGORY V - 95 - 124 MINUTES SKIN TO SKIN
LINE 6. CATEGORY VI -125 - 180 MINUTES SKIN TO SKIN
LINE 7. CATEGORY VII - MORE THAN 180 MIN. SKIN TO SKIN
The number of cases that occurred in each of the categories during the selected period can be determined by reviewing log books or anaesthetic records. The criterion for classification is the skin-to-skin time.
The hours per room day for each of specified groups of constant time are determined by completing the constant time calculation pages 1 & 2. The values should remain unchanged between periodical workload reports and can be reused.
LINE 8. TOTAL VARIABLE HOURS
CONSTANT HOURS
HOURS PER ROOM DAY
ROOM DAYS PER PERIOD
CONSTANT HOURS
The number of room days for the selected period can be determined by reviewing the log books or slates. The value will be the same for each constant time grouping and should be repeated in each box.
LINE 9. GENERAL ADMINISTRATION
TRAINING AND EDUCATION
LINE 10. IN-SERVICE EDUCATION AND ORIENTATION
LINE 11. FORMAL TEACHING PROGRAM
LINE 12. CLERICAL
LINE 13. ROUTINE DUTIES
LINE 14. TOTAL CONSTANT HOURS
Standard hours are determined by adding the total variable and total constant hours together. To this a further 15% is added to allow for coffeebreaks and other personal, fatigue and delay time.
STANDARD HOURS
LINE 15. VARIABLE HOURS + CONSTANT HOURS
LINE 16. 15% PERSONAL FATIGUE AND DELAY ALLOWANCE
LINE 17. STANDARD HOURS PER PERIOD
WORKED HOURS
LINE 18. ADMINISTRATIVE AND CLERICAL
LINE 19. R.N.
LINE 20. TECHNICIANS
LINE 21. AIDES AND ORDERLIES
LINE 22. WORKED HOURS PER PERIOD
LINE 23. PRODUCTIVITY RATING FOR PERIOD:
(STANDARD HRS. ÷ WORKED HRS.) X 100 =
The productivity rating is determined by dividing standard hours for the period by the worked hours for the period. The result can be expressed as a percentage by multiplying by 100.
Worked hours for each category of O.R. personnel can be determined by reviewing the O.R. Payroll Record for the specific period. Care should be taken to avoid entering paid hours.

SECTION 4

4.1 Alternative Uses of the Methodology
4.2 Management Indicators
4.3 Limitations
4.4 Modifications

4.1 Alternative Uses of Methodology

One objective of this methodology was the development of a mechanism to compare, on a retrospective basis, the staffing used for a particular caseload to that which should have been used as defined by the methodology.

However, the design of the methodology allows for potential additional uses as 1) a staffing forecasting tool, 2) a patient specific reporting mechanism, or 3) a workload measurement system.

(1) Staffing forecasting tool: Since the methodology allows a hospital to determine the total hours of staffing necessary to carry out a procedure of a given length, it would be possible to forecast future staffing needs by applying a simple two-step process.

- forecast the case-mix and caseload by applying standard statistical forecasting methods such as linear regression, using historical O.R. utilization data usually easily accessible in most hospitals.

- categorize the case-mix into the 7 skin-to-skin categories and multiply the projected number of cases in each category by the average time per case for the category. This will yield the total number of variable worked hours required to carry out that particular caseload. Determine the number of room-days necessary to perform the case-mix and multiply by the average constant time per room-day. By adding variable and constant time, and multiplying the result by a 15% P.F. & D. allowance, the total standard hours can be determined.

(2) Patient specific reporting mechanism: The methodology can be used to identify the staffing used on a specific surgical case. The skin-to-skin time on any given case can be easily determined from O.R. statistics routinely kept in surgical suites. Once the skin-to-skin time has been identified and the surgical case assigned to any one of the 7 time categories, it is easy to determine from the Workload Report or the Variable and Constant Time Calculation forms, (See pages 54-57) how may staffing hours were expended on that specific case.

This patient specific reporting function would allow hospitals to meet future management information requirements.

(3) Workload Measurement System: Because the staffing methodology is based upon a workload made up of specific activities individually identified and timed, it is possible to

isolate any type of function and determine the number of hours spent in performing it by multiplying its time value in each category by the number of occurences.

4.2 Management Indicators

The Methodology is based upon the development of average time values for specific activities, each having been defined, timed, and recorded individually. It is therefore possible to derive significant performance indicators by selecting various activities or categories of cases of special interest.

The Methodology does not identify categories of staff and link them to specific categories of activities. This was done intentionally because labour laws and traditional operational concepts vary from province to province. It would be easy however, to use Table I: Variable Time Values and Form II: Variable Time Calculation to identify activities performed by a specific level of staff and determine the number of standard hours expended.

Some examples of performance indicators are as follows:

- Number of surgical cases per category
- Total hours of surgery per reporting period
- Percentage of utilization of the O.R.
- Ratio of professional versus non professional staff
- Paid hours per category
- etc...

4.3 Limitations

Many factors affect the utilization of operating rooms, several of which have typically been beyond the control of the O.R. to deal with directly.

Among those are:

- number and type of emergency procedures to be accommodated during scheduled hours of operation;
- delays caused by patients not arriving on time for the procedure;
- delays caused by surgeons and/or anaesthetists not arriving on time for the procedure;
- delays caused by the patient not being ready (chart incomplete, lab test results not available, food or drink mistakenly administered, etc.);
- Changes in slated procedures or unexpected difficulties which lengthen the duration of a given case.

Other factors, also beyond the control of the O.R., affect the amount of resources necessary to carry out procedures. Such factors as age, size, and general condition of the patient, acuity of illness, and type of procedure may affect the number of staff required to start and finish the case.

So many unforeseeable factors have made O.R. staffing a very difficult and inexact science. Given these circumstances, it is felt that nothing short of a case by case review of activities and a recording of the particular circumstances affecting each and every procedure would produce an exact staffing methodology.

These factors have been taken into consideration in the development of this manual and some words of explanation are necessary to define limitations.

While time values were developed for various activities, no judgements were made as to the quality of the functions accomplished, or the efficiency of the methods used. It is recognized that different employees take different amounts of time to complete the same task in different ways. Furthermore, other factors (independent of the staff) can affect the time value of a particular activity. Gathering together sterile supplies for a procedure is a case in point. If it takes place following a delivery of sterile supplies from C.S.D., and all items are available, even a category VII case can be pulled in a few minutes. If

however, most items are not available, and have to be tracked down or "borrowed" from various locations, the same activity will take considerably longer.

This kind of difficulty can be eliminated by timing enough examples of a specific activity to allow the time values to average themselves into a representative standard value for that activity.

The methodology has demonstrated through statistical testing that, based on a minimum of 200 cases per reporting period, it can achieve an accuracy rating of plus or minus 2%. A data base of less than 200 cases per reporting period will mean a deterioration in the accuracy rating achievable. It is therefore recommended that the reporting period chosen by individual hospitals be designed to include at least 200 cases.

4.4 Modifications

IT IS RECOMMENDED THAT THE VARIABLE AND CONSTANT TIME VALUES DEVELOPED THROUGH OBSERVATIONS IN THE TEST HOSPITALS NOT BE AMENDED. They represent normal times for specific activities performed in a variety of settings representative of the full range of sizes and scopes of services of general hospitals.

It is however, possible to individualize this methodology in several ways:

- By choosing time values for certain operational options rather than others as applicable, any hospital can tailor the methodology to fit its own systems. For instance, the methodology will describe Surgical Suite X which has decentralized supplies, processes its specialty instruments, uses 2 porters, processes dirty instruments and uses the wet/vac method as accurately as it will Surgical Suite Y which has centralized supplies, does not handle specialty instruments, uses 1 porter, does not process dirty instruments and cleans floors using the one-bucket method.

The methodology can also be adjusted to reflect situations when a specific activity is not consistently performed in the same fashion.

The patient portering example of page 14 can be further developed to explain how the methodology deals with such cases.

- For a specific reporting period, the O.R. log book, anaesthetic record or slates can identify the number of orthopedic surgical cases performed. The number of cases, multiplied by the 2-porter time value per case will yield the total transport time using 2 porters. The number of non-orthopedic cases multiplied by the 1-porter time value, will yield the total transport time using 1 porter. By adding the two figures, a total transport time can be arrived at, or:

(22.3 X # ortho cases) + (12.6 X # non-ortho cases)

= total transport time.

When using the methodology as a <u>forecasting</u> tool, the same results can be achieved by using a projected percentage figure as opposed to an actual number of cases, or

(22.3 X % ortho cases) + (12.6 X % non-ortho cases)

= total projected transport time.

The same percentage method can be used to modify any aspect of the data base where operational options are available.

Measuring Workload Performed by O.R. Dedicated Personnel

Certain functions in the O.R. suite are often performed by personnel dedicated to the O.R. but not on the O.R. budget. (Prime examples are porters and house-keepers). It is possible to eliminate the work performed by these individuals from the Workload Report by not including the time values associated with their function in the variable time calculations. Similarly do not list their worked hours in the worked hours calculations.

If a portion of these functions is still completed by O.R. personnel during certain times of the day when the dedicated individuals are not present, the percentage method can be used to determine the time value of the additional workload.

APPENDIX A

APPENDIX A: ACTIVITY DESCRIPTIONS

For purposes of this study, and to ensure the applicability of the standard time values to functions carried out in any hospital, the activities defined in the User Guide have been described as follows:

I VARIABLE ACTIVITIES

PRE-OP ACTIVITIES: Include those functions carried out to prepare both the O.R. environment and the surgical patient for the performance of a surgical procedure.

READY SUPPLIES FOR THE CASE: Gather together sterile instruments, basin and linen sets, and all other sterile supplies necessary for the performance of a surgical procedure.

1. Supplies centralized in O.R.: All sterile supplies, including sutures, instruments sets, etc... are kept in one central area which can be referred to as sterile core, central core etc...

2. Supplies decentralized in O.R.: All sterile supplies, including sutures, instruments sets, etc... are kept in several areas within the surgical suite. For example, linen, basin and instrument sets in one room, sutures in the operating rooms themselves, dressings, tubing and other supplies in a third location.

3. Specialty instruments to be sterilized: Specialty, one-of-a-kind, and/or doctor-owned instruments are washed and stored in the surgical suite or the operating room and have to be collected and flash-sterilized by O.R. staff immediately prior to being used for a surgical procedure.

PRE-OP ASSESSMENT OF PATIENT NEEDS: The development, prior to a surgical procedure, of a patient nursing care plan, identifying special needs to be met during and immediately after the procedure.

4. Visit patient: Pre-op visit to the surgical patient to assess his/her condition, explain the nature of events to take place, answer questions and plan the peri-operative course of care. This pre-op visit is typically an integral part of the pre-op assessment of patient needs. Although visiting the surgical patient pre-operatively seems to have gained wide acceptance as a desirable nursing practice, its implementations seems very much dependent upon nursing staff availability. Because of this, no "average" time value was developed. Each user should develop a time value as appropriate.

5. Prepare surgical site: Shaving the operative site and surrounding areas in preparation for the surgical procedure.

TRANSPORT PATIENT TO O.R.: Move the patient from his/her pre-op location (ward, day care unit, etc...) to the operating room in preparation for the surgical procedure. This move includes travelling from the operating room to the pre-op location of the patient, checking his/her hospital chart for completion of all necessary forms and consents, identifying the patient and the site for surgical intervention, transferring the patient from the bed to the mode of transportation (stretcher, Surgi-Lift, etc...) if applicable, and bringing the patient to the operating room.

6. Transport with one porter: Accomplishing the move of the patient from his/her pre-op location to the operating room utilizing one porter.

7. Transport with two porters: Accomplishing the move of the patient from his/her pre-op location to the operating room utilizing two porters.

SET-UP CASE: Perform all activities directly related to the immediate preparation for the anaesthetic induction of the patient and the performance of the surgical intervention.

8. Transport supplies/open bundles: Bring into the operating room all sterile and unsterile supplies and equipment necessary for the performance of a surgical intervention, arranging those onto the appropriate tables, ring stands etc...and opening the outer wrapper of the sterile bundles.

9. Organize sterile set-up: Open the inner wrapper of all sterile bundles as well as the sterile packaging of all instruments and supplies, and set those out on the appropriate furniture in the proper configuration for use in the surgical procedure.

10. Organize unsterile set-up: Bring into the operating room and position appropriately, all non sterile supplies and equipment necessary to the performance of a surgical intervention. Non sterile supplies and equipment can include IV pole, ring stands and tables, carts, positioning equipment, bolsters, pillows, medical gas tanks, suction equipment, compressed air tanks etc...

11. Admit patient to O.R.: Receive the patient into the surgical suite. Depending on whether or not the suite contains a holding area, the admission can take place either in the holding area, or outside of the operating room. The admission process includes greeting the patient and providing general bio-psycho-social support such as checking the identity band against the slate, checking the chart, ensuring that no food or drink have been recently consumed, answering any last minute questions, etc...

It also includes bringing the patient into the operating room, moving him/her to the table and fastening the lap belts for security.

12. Prepare patient for anaesthesia and surgery: Perform all activities necessary to ready the patient for anaesthetic induction and surgery. This includes assisting the anaesthetist to induce the patient by applying monitor leads, comforting the patient, and otherwise anticipating the anaesthetist's needs. Following anaesthetic induction, preparation for surgery includes positioning, administering the surgical prep(s) and draping the patient.

    INTRA-OP ACTIVITIES: Those functions carried out in direct support of a surgical procedure during the period of time (also referred to as skin-to-skin) which stretches from the initial incision into the skin to the insertion of the last skin suture or staple.

13. Assist surgeon(s) with procedure: During the intra-operative (skin-to-skin) period, assist the surgeons by anticipating their needs for instruments and supplies, monitor the patient's condition and fulfill all legal requirements of the case by completing the charting.

    POST-OP ACTIVITIES: Includes those functions which are necessary to remove the patient from the operating room, clean the room of all linen, instruments, supplies and equipment used in the case, and get it ready to be set up for the next case.

14. Prepare patient for transfer to bed: Remove drapes from patient, clean and dress the incision, take off monitor leads, and assist anaesthesiologist with extubation while keeping the patient worm and dry and monitoring his/her condition.

15. Transfer patient off table: Transfer all IV and blood bags to the bed and move patient from the operating table.

16. Transport patient to P.A.R./unit: Accompany the anaesthetist in taking the patient from the operating room to the P.A.R., day care or ward as appropriate.

17. Report to P.A.R./unit nurse: Give the P.A.R./Unit nurse any relevant information concerning nursing patient care during the intra-operative period.

18. Dismantle case: Remove from the operating room all supplies, equipment, instruments etc... that have been used for a particular case.

    PROCESS INSTRUMENTS: Clean instruments used in an intervention and get them ready for re-use.

19. Instruments totally processed in C.S.D.: The C.S.D. (or its equivalent) has complete responsibility for rinsing, washing, sanitizing, sterilizing and wrapping all sterile supplies. Operating room staff has no involvement in the process beyond taking the instrument from the operating room to a pre-determined pick-up point.

20. Partially processed in O.R.: Operating room staff is involved in the early stages of instrument processing, such as rinsing, making up instrument sets, washing etc...

21. Totally processed in O.R.: O.R. staff is responsible for the entire processing of all surgical instruments, including rinsing, washing, making up instrument sets wrapping, sterilizing and storing.

22. Specialty instruments: Operating room staff is responsible for the entire processing of the specialty instruments, including rinsing, washing, drying, wrapping (when applicable) and storing.

23. Clean-up equipment/furniture: Following a surgical intervention, clean the operating room furniture (table, IV pole ring stands, kick-buckets etc...) in preparation for the next case.

. CLEAN-UP FLOOR: Wash the floor of the operating room in preparation for the next case.

24. Clean-up floor/one bucket method: Wash the floor of the operating room with the solution requiring no rinsing.

25. Clean-up floor/two bucket method: Wash the floor of the operating room with a solution which requires rinsing and mopping dry.

26. Clean-up floor/wet-vac method: Wash the floor of the operating room by flooding it with a chemical solution which is then vacuumed dry.

II CONSTANT ACTIVITIES

GENERAL ADMINISTRATION: Includes miscellaneous tasks relating to the overall operation of the surgical suite, such as attending meetings, hiring and evaluating staff, compiling reports and exercising overall supervision over the area.

1. O.R. meetings: Attend meetings which deal with matters directly related to the operation of the surgical suite. Does not include O.R. representation at general hospital-wide meetings.

2. Staff matters: Interview prospective staff, conduct performance evaluations and deal with general staff problems as applicable.

3. Data and reports: Compile utilization and other operating room statistics and generate periodic reports as required.

4. Staffing assignments: Develop staffing rotations on a regular basis.

5. General supervision: Oversee the general functioning of the surgical suite, including staff performance.

TRAINING AND EDUCATION: Includes those activities which relate to maintaining and/or upgrading skills in specific areas of operating room nursing.

7. In-service/orientation: Organize, conduct and/or attend sessions to familiarize new staff with the working environment or to introduce newly acquired equipment, newly developed techniques, or changed operational systems. Organize, conduct and/or attend courses designed to maintain or increase skills and knowledge into specific areas of O.R. nursing.

8. Formal training programs: Organize and conduct programs to provide nurses with specialized operating room nursing training.

CLERICAL DUTIES: Includes those activities relating to the daily routine management of the surgical suite, such as providing liaison with doctors' offices, producing slates, booking cases as applicable, ordering supplies, managing service contracts etc...

9. Inventory/restock general supplies: Check general supplies (stationary, forms etc...) to verify quantities on hand. Prepare orders for needed general supplies and restock as needed.

10. General management: Perform miscellaneous functions relating to the over-all function of the surgical suite, such as answering telephone calls and relaying messages, communicating with doctors' offices and/or hospital wards, providing liaison with on-going cases and fulfilling other general clerical functions as necessary.

11. Schedule: Produce patient schedules for next day surgery, distribute and post as appropriate. Amend current schedule as necessary.

12. Routine booking: Schedule all elective and emergency surgical procedures.

13. Emergency booking only: Schedule emergency surgical procedures only.

ROUTINE DUTIES - sterile core: Perform those non specific case-related general duties which are necessary to allow the sterile core (or central core) to function most efficiently.

15. Inventory/restock: Check the quantities of sterile supplies available, order if appropriate and restock.

16. Cart/shelf cleaning: Routinely clean the carts, shelves or racks on which sterile supplies and bundles are kept, by removing all supplies, cleaning, and replacing the supplies.

17. Rotate supplies: Verify the sterilization expiration date on sterile supplies and bring forward items closest to the expiration date.

ROUTINE DUTIES - UTILITY ROOM: Perform those non specific case-related general duties which are necessary to allow the utility room to function properly.

19. Clean: Perform routine cleaning of the utility room, including wiping down sinks and counters, and routine cleaning and/or wrapping of certain items.

20. Inventory/restock cleaning supplies: Verify the quantities of cleaning supplies on hand, order and restock as appropriate.

ROUTINE DUTIES - anaesthetic room: Perform those non specific case-related general duties which are necessary to allow the anaesthetic room to function properly.

22. Cart clean-up: Perform the end-of-day routine cleaning of the anaesthetic carts.

23. Cart restock: Perform the end-of-day routine restocking of the anaesthetic carts with necessary drugs and supplies.

24. Inventory/restock anaesthetic supplies: Check the quantity of anaesthetic drugs and supplies on hand. Order and restock as necessary.

25. Processing tubes and masks: Decontaminate and soak or wash anaesthetic tubing and masks as appropriate.

ROUTINE DUTIES - holding area: Perform those non specific case-related general duties which are necessary to allow the holding area to function properly.

26. Bed/stretcher washing: Wash down beds and stretchers used in bringing patients from their pre-op location to the surgical suite.

ROUTINE DUTIES - general upkeep: Perform those non specific case-related general duties which are necessary to allow the surgical suite to function properly.

27. Inventory/restock general supplies: Verify the quantity of general supplies on hand (dressings, sutures, gloves, disposable prep set etc...)

28. Clean linen storage: Put away clean linen to be used in the surgical suite.

29. Garbage/linen disposal: Remove garbage and soiled linen bags from utility room to disposal point.

30. Terminal room cleaning: At the end of each day (or possibly in the middle of the day after a "dirty" case) perform in-depth cleaning of the operation room by washing down furniture, lights, ceiling, walls etc...

APPENDIX B

TABLE 1: VARIABLE TIME VALUES PAGE 1

ACTIVITIES PERFORMED BY O.R. PERSONNEL	MINUTES PER CATEGORY						
	I	II	III	IV	V	VI	VII
PRE-OP ACTIVITIES	<30	30-49	50-69	70-94	95-124	125-180	> 180
READY SUPPLIES FOR CASE							
1. SUPPLIES CENTRALIZED IN O.R.	2.8	2.0	3.0	4.0	4.0	6.0	6.0
2. SUPPLIES DECENTRALIZED IN O.R.	2.0	2.4	2.0	2.4	2.1	2.1	2.1
3. SPECIALTY INSTR. TO BE STERILIZED	1.9	1.9	1.1	2.0	2.7	3.9	1.0
PRE-OP ASSESSMENT OF PAT. NEEDS							
4. VISIT PATIENT (USER DEVELOPED)							
5. PREPARE SURGICAL SITE	15.5	15.5	15.5	15.5	15.5	25.0	25.0
TRANSPORT PATIENT TO O.R.							
6. TRANSPORT WITH ONE PORTER	12.3	12.3	12.3	12.3	12.3	12.3	12.3
7. TRANSPORT WITH TWO PORTERS	22.6	22.6	22.6	22.6	22.6	22.6	22.6
SET-UP CASE							
8. TRANSPORT SUPPLIES/OPEN BUNDLES	3.6	5.2	5.4	5.7	7.6	9.6	10.8
9. ORGANIZE STERILE SET-UP	9.4	12.6	14.0	17.7	32.1	42.9	50.9
10. ORGANIZE UNSTERILE SET-UP	5.2	4.3	3.6	5.9	6.0	11.3	13.6
11. ADMIT PATIENT TO O.R.	2.2	2.2	2.2	2.2	2.2	2.2	2.2
12. PREPARE PAT. FOR ANAES. /SURGERY	15.5	19.2	19.9	18.6	29.1	32.6	53.5
INTRA-OP ACTIVITIES							
13. ASSIST SURGEON(S) WITH PROCEDURE	28.4	77.8	116.6	161.8	214.0	298.8	507.4

TABLE I: VARIABLE TIME VALUES PAGE 2

ACTIVITIES PERFORMED BY O.R. PERSONNEL	MINUTES PER CATEGORY						
	I	II	III	IV	V	VI	VII
POST-OP ACTIVITIES	<30	30-49	50-69	70-94	95-124	125-180	> 180
14.PREPARE PATIENT FOR TRANSFER TO BED	5.6	4.8	6.7	6.8	6.9	8.9	12.3
15.TRANSFER PATIENT OFF TABLE	3.1	2.5	3.6	3.7	5.6	7.1	9.9
16.TRANSPORT PATIENT TO P.A.R./UNIT NURSE	1.5	1.5	1.5	1.5	1.5	1.5	1.5
17.REPORT TO PAR/UNIT NURSE	2.1	2.1	2.1	2.1	2.1	2.1	2.1
18.DISMANTLE CASE	5.4	5.0	7.4	8.9	8.0	11.2	10.6
PROCESS INSTRUMENTS							
19.TOTALLY PROCESSED IN C.S.D.	1.1	1.1	1.1	1.1	1.1	1.1	1.1
20.PARTIALLY PROCESSED IN O.R.	1.6	3.5	3.1	3.6	8.6	8.3	8.6
21.TOTALLY PROCESSED IN O.R.	6.9	6.9	10.0	10.0	16.7	16.7	20.9
22.SPECIALTY INSTRUMENTS	2.0	6.2	4.8	5.4	5.9	5.9	5.9
23.CLEAN-UP EQUIPMENT/ FURNITURE	1.8	1.8	1.8	1.8	1.8	1.8	1.8
CLEAN-UP FLOOR							
24.ONE BUCKET METHOD	1.8	1.8	1.7	1.8	1.8	1.8	1.8
25.TWO BUCKET METHOD	2.4	2.4	2.4	2.4	2.4	2.4	2.4
26.WET/VAC. METHOD	2.8	3.1	3.5	4.1	3.0	2.3	3.0

FORM I DATE DAILY CASE CATEGORY LOG HOURS_____

CASE CATEGORY																									TOTAL
LESS THAN 30 MINUTES - CAT. I																									
30 - 49 MINUTES CAT. II																									
50 - 69 MINUTES CAT. III																									
70 - 94 MINUTES CAT. IV																									
95 - 124 MINUTES CAT. V																									
125 - 180 MINUTES CAT. VI																									
MORE THAN 180 MINUTES - CAT. VII																									

FORM II: VARIABLE TIME
CALCULATION PAGE 1

ACTIVITIES PERFORMED BY O.R. PERSONNEL	MINUTES PER CATEGORY						
	I	II	III	IV	V	VI	VII
PRE-OP ACTIVITIES							
READY SUPPLIES FOR CASE							
1. SUPPLIES CENTRALIZED IN O.R.							
2. SUPPLIES DECENTRALIZED IN O.R.							
3. SPECIALTY INSTR. TO BE STERILIZED							
PRE-OP ASSESSMENT OF PAT. NEEDS							
4. VISIT PATIENT (USER DEVELOPED)							
5. PREPARE SURGICAL SITE							
TRANSPORT PATIENT TO O.R.							
6. TRANSPORT WITH ONE PORTER							
7. TRANSPORT WITH TWO PORTERS							
SET-UP CASE							
8. TRANSPORT SUPPLIES/OPEN BUNDLES							
9. ORGANIZE STERILE SET-UP							
10. ORGANIZE UNSTERILE SET-UP							
11. ADMIT PATIENT TO O.R.							
12. PREPARE PAT. FOR ANAES./SURGERY							
INTRA-OP ACTIVITIES							
13. ASSIST SURGEON(S) WITH PROCEDURE							

FORM II: VARIABLE TIME
CALCULATION PAGE 2

ACTIVITIES PERFORMED BY O.R. PERSONNEL	MINUTES PER CATEGORY						
	I	II	III	IV	V	VI	VII
POST-OP ACTIVITIES							
14. PREPARE PATIENT FOR TRANSFER TO BED							
15. TRANSFER PATIENT OFF TABLE							
16. TRANSPORT PATIENT TO P.A.R./UNIT NURSE							
17. REPORT TO PAR/UNIT NURSE							
18. DISMANTLE CASE							
PROCESS INSTRUMENTS							
19. TOTALLY PROCESSED IN C.S.D.							
20. PARTIALLY PROCESSED IN O.R.							
21. TOTALLY PROCESSED IN O.R.							
22. SPECIALTY INSTRUMENTS							
23. CLEAN-UP EQUIPMENT/ FURNITURE							
CLEAN-UP FLOOR							
24. ONE BUCKET METHOD							
25. TWO BUCKET METHOD							
26. WET/VAC. METHOD							
27. TOTAL MINUTES PER CASE CATEGORY							
28. TOTAL HOURS (MINUTES 60)							

FORM III: CONSTANT TIME
CALCULATION PAGE 1

DATE	DATE LAST REVISED	PREPARED BY	
ACTIVITIES PERFORMED BY O.R. PERSONNEL		COL. 1 HOURS/ROOM DAY AS PER METHODOLOGY	COL. 2 USER DETERMINED HOURS/ROOM DAY
GENERAL ADMINISTRATION			
1. O.R. MEETINGS		.4	
2. STAFF MATTERS			
3. DATA AND REPORTS			
4. STAFFING ASSIGNMENTS			
5. GENERAL SUPERVISION		.6	
6. OTHER			
SUB-TOTAL			
TRAINING AND EDUCATION			
7. IN-SERVICE/ORIENTATION		.2	
8. FORMAL TRAINING PROGRAMS		.8	
SUB-TOTAL			
CLERICAL DUTIES			
9. INVENTORY/RESTOCK GENERAL SUPPLIES		1.3	
10. GENERAL MANAGEMENT			
11. SLATES			
12. ROUTINE BOOKING		1.3	
13. EMERGENCY BOOKING ONLY		.2	
14. OTHER			
SUB-TOTAL			
ROUTINE DUTIES - STERILE CORE			
15. INVENTORY/RESTOCK		.5	
16. CART/SHELF CLEANING			
17. ROTATE SUPPLIES			
18. OTHER			
SUB-TOTAL			

FORM III: CONSTANT TIME
CALCULATION PAGE 2

DATE	DATE LAST REVISED	PREPARED BY	
ACTIVITIES PERFORMED BY O.R. PERSONNEL		COL. 1 HOURS/ROOM DAY AS PER METHODOLOGY	COL. 2 USER DETERMINED HOURS/ROOM DAY
ROUTINE DUTIES - UTILITY ROOM 19. CLEAN 20. INVENTORY/RESTOCK CLEANING SUPPLIES 21. OTHER SUB-TOTAL		.3	
ROUTINE DUTIES - ANAESTHETIC ROOM 22. CART CLEAN-UP 23. CART RESTOCK 24. INVENTORY/RESTOCK ANAESTH. SUPPLIES 25. PROCESSING TUBES AND MASKS 26. OTHER SUB-TOTAL		.4	
ROUTINE DUTIES - HOLDING AREA 27. BED/STRETCHER WASHING 28. OTHER SUB-TOTAL		.4	
ROUTINE DUTIES - GENERAL UPKEEP 29. INVENTORY/RESTOCK GENERAL SUPPLIES 30. CLEAN LINEN STORAGE 31. GARBAGE/LINEN DISPOSAL 32. TERMINAL ROOM CLEANING 33. OTHER SUB-TOTAL		.3 .6	

FORM IV. WORKLOAD REPORT

DATE	PERIOD	PREPARED BY
NUMBER OF CASES	HRS. OF SURGERY	O.R. UTILIZATION %

VARIABLE HOURS

		HOURS PER CASE		CASES PER PERIOD		VARIABLE HOURS
LINE 1.	CATEGORY I - LESS THAN 30 MIN. SKIN TO SKIN		X		=	
LINE 2.	CATEGORY II - 30 - 49 MINUTES SKIN TO SKIN		X		=	
LINE 3.	CATEGORY III - 50 - 69 MINUTES SKIN TO SKIN		X		=	
LINE 4.	CATEGORY IV - 70 - 94 MINUTES SKIN TO SKIN		X		=	
LINE 5.	CATEGORY V - 95 - 124 MINUTES SKIN TO SKIN		X		=	
LINE 6.	CATEGORY VI -125 - 180 MINUTES SKIN TO SKIN		X		=	
LINE 7.	CATEGORY VII - MORE THAN 180 MIN. SKIN TO SKIN		X		=	

LINE 8. TOTAL VARIABLE HOURS _____

CONSTANT HOURS

		HOURS PER ROOM DAY		ROOM DAYS PER PERIOD		CONSTANT HOURS
LINE 9.	GENERAL ADMINISTRATION TRAINING AND EDUCATION		X		=	
LINE 10.	IN-SERVICE EDUCATION AND ORIENTATION		X		=	
LINE 11.	FORMAL TEACHING PROGRAM		X		=	
LINE 12.	CLERICAL		X		=	
LINE 13.	ROUTINE DUTIES		X		=	

LINE 14. TOTAL CONSTANT HOURS _____

STANDARD HOURS

LINE 15. VARIABLE HOURS + CONSTANT HOURS _____

LINE 16. 15% PERSONAL FATIGUE AND DELAY ALLOWANCE + _____

LINE 17. STANDARD HOURS PER PERIOD _____

WORKED HOURS

LINE 18. ADMINISTRATION AND CLERICAL _____

LINE 19. R.N. _____

LINE 20. TECHNICIANS _____

LINE 21. AIDES AND ORDERLIES _____

LINE 22. WORKED HOURS PER PERIOD _____

LINE 23. PRODUCTIVITY RATING FOR PERIOD:
(STANDARD HRS. + WORKED HRS.) X 100 = _____

APPENDIX C

FEDERAL/PROVINCIAL SUB-COMMITTEE ON PRODUCTIVITY IMPROVEMENT

Mr. Donald F. Moffatt,
(Chairman)
Director,
Institutional and Professional Services,
Health Services Directorate,
Health Services & Promotion Branch,
Health and Welfare Canada,
OTTAWA, Ontario.

Mrs. Thelma Cameron,
Director of Hospital Standards and Administration,
Hospital and Health Services Commission,
CHARLOTTETOWN, P.E.I.

Mr. Glen E. Chapman,
Executive Director,
Brandon General Hospital,
BRANDON, Manitoba.

Mrs. Norm Dawson,
Senior Analyst,
Institutional Statistics Section,
Health Division,
Statistics Canada,
OTTAWA, Ontario.

Dr. W.A. Dorsett,
Acting Associate Director of Hospital Services,
Saskatchewan Hospital Services Plan,
REGINA, Saskatchewan.

Mr. Louis de G. Fournier,
Chief,
Institutional Statistics Section,
Health Division,
Statistics Canada,
OTTAWA, Ontario.

Mr. Don Harriman,
Coordinator of Hospital Services and Standards,
Department of Health,
FREDERICTON, New Brunswick.

*Mr. Stephen K. Jensen,
Assistant Executive Director,
Camp Hill Hospital,
HALIFAX, Nova Scotia.

Mr. M.H. Lamb, Director,
Institutional Operations Branch,
Alberta Hospitals and Medical Care,
EDMONTON, Alberta.

Mr. N. Ludlow,
Director of Hospital Services Division,
Department of Health,
Confederation Building,
ST. JOHN'S, Newfoundland.

Ms. Betty Lowry,
Director,
MIS Project,
c/o Canadian Hospital Association,
OTTAWA, Ontario.

Dr. H.H. Rubarth,
Consultant in Health Administration,
Institutional & Professional Services,
Health Services Directorate,
Health Services & Promotion Branch
OTTAWA, Ontario.

*Representing the Nova Scotia Department of Health

Dr. D. Schatz,
Executive Director,
Toronto Institute of Medical
Technology,
TORONTO, Ontario.

Mr. Robert Siemens,
Director, Urban Health Facilities Division,
Manitoba Health Services Commission,
WINNIPEG, Manitoba.

Mr. Malcolm Walker,
Director,
Institutional Operations Branch,
Ontario Ministry of Health,
TORONTO, Ontario.

Mr. John Watts,
Manager,
Management Engineering
Service,
Professional and Institutional
Services,
Ministry of Health,
VICTORIA, British Columbia.